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Submitting Material for Publication

We encourage our readers to consider submitting material on early North American numismatics to *CNL* for publication. In general, this includes coins, tokens, paper money, and medals that were current before the U.S. Federal Mint began operations in 1793. However, there are certain pieces produced after the 1793 date that have traditionally been considered part of pre-Federal numismatics and should be included. We cover all aspects of study regarding the manufacture and use of these items. Our very knowledgeable and friendly staff will assist potential authors to finalize submissions by providing advice concerning the text and help with illustrations. Submissions in either electronic or hard copy format, should be sent to the editor via the e-mail address given above or through the ANS at their postal address. Electronic text submissions should be formatted in Word with separate grayscale images.

Editorial

This begins The Colonial Newsletter's 57th year. I believe 2017 will be the best year yet! We start the year off with a bang – the publication of the "Transcript of the 1788 Connecticut and Federal Mint Account Book" prepared by Randy Clark and Christopher McDowell with the assistance of many others. The original document can be viewed on the Newman Portal at https://nnp.wustl.edu/library/ar chivedetail/515916?Year=1788&display Amt=50 where it is called the "Jeremiah Platt Account Book." After much deliberation, it has been determined that the name provided herein is more appropriate. The original document makes liberal use of abbreviations and the handwriting can be challenging to read in places, making this transcript an invaluable research tool.

In addition to the 1788 account book, a similar 1787 book has also been located. The 1787 book relates primarily to activities at Mark Leavenworth's New Haven business, but includes a great deal of new information regarding the Connecticut Mint, of which Mr. Leavenworth was an investor and part owner. Because of its length and the fact that it is generally much more difficult to read and translate, it has taken us much longer to transcribe the 1787 document, but the work is nearing completion and will be ready for publication in CNL-164. The importance of these documents and transcripts to researches cannot be overstated—these primary materials will be mined for decades and open up entirely new avenues of research into our numismatic past.

The transcripts were prepared by two independent teams, one led by Mr. Clark and the other by Mr. McDowell. Each group working on its own was able to make significant advances in translating

and understanding the documents that the other group was unable to duplicate. In order to provide our subscribers and posterity with the best transcription possible, the two team efforts have been combined and the result of the collaboration is published here for the first time. In preparing the transcript, every effort was made to keep true to the original while at the same time creating a new document useful to the modern researcher. Archaic accounting abbreviations have in some instances been modernized, but math errors appearing in the original have been left uncorrected. Spelling was not standardized at the time and use of the "long S" was still common-in order to assist the modern reader, most spelling errors have been corrected and the "long S" abandoned. The books are kept not in dollars, but in British pounds, shillings, and pence, and the weights and measures are also those in use at the time—these things have not been modernized and are as they appear in the original.

A guick tutorial for those unfamiliar with the old English system will be of assistance: The symbol "s" stands for shilling, and "d" for pence. One English pound (symbol £) is equal to 20s, and 12d is equal to one shilling; thus, there is 240 pence to a pound. All deviations from the original were debated by a group of researchers and changes made only when it was strongly felt the change would make the document more useful. We are confident in the overall accuracy of this transcript. With that said, the transcript is intended to be an aid to understanding the original, not as a substitute for it. Anyone discovering errors in the transcript is invited to notify ye editor, who pledges to keep a corrected version of the transcript for at least 10 years and to provide it to any subscriber conducting research at no charge.

The story of the discovery of these documents will need to be told in full at a later date, but the short version is that Randy Clark found them by accident at the New Haven Museum in Connecticut and Jay Knipe independently made the same discovery, but after Mr. Clark. The Colonial Coin Collectors Club (C4) is currently working with the New Haven Museum to preserve these numismatic treasures for future generations.

CNL is pleased to publish two articles based on the 1788 transcript—the first of what will certainly be many. One is authored by ye editor and concerns the use of child and slave labor to produce Fugio coppers and the other is written by Gary Trudgen and provides background to the story of the presses used to strike the Fugio coinage. Mr. Trudgen was one of the individuals who worked tirelessly on the 1788 transcript—a team that also included Jeff Rock and Bruce Smith. Although Mr. Trudgen has been an active part of CNL's editorial team for decades. his name has not appeared as an author for a long time. Indeed, it has been 10 years since an article by Mr. Trudgen has graced the pages of this publication —far too long. Mr. Trudgen and I share a common belief that biography can unlock many of the mysteries of colonial numismatics. A bit of a mystery himself, seldom appears at gatherings or coin shows, Mr. Trudgen is a giant of numismatic scholarship. Over the past two years it has been my great pleasure to work closely with him on several projects and if I were to pick one man whose work has had the greatest impact on my own, it would be Gary Trudgen.

The final article in this issue (the first in order of appearance) is by Mark Sportack and concerns the origins of Hogge Money. I was very impressed with this ar-

ticle when it was first submitted and believed it to be an invaluable contribution to the series, but since Hogge Money is far from my area of expertise, I forwarded it to assistant editors, Lou Jordan and John Kleeberg for their comments. Messrs. Jordan and Kleeberg are two of *CNL*'s best and most insightful editors—the remarks received back from this editorial team were highly complementary regarding the quality of Mr. Sportack's research, writing, and conclusions. As such, we believe this article is something special and should be read by all subscribers regardless of interest in the Hogge series.

Christopher R. McDowell,

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Gerard de Malynes: Accidental Moneyer to the New World by Mark A. Sportack; Clifton, VA

The question of who made Hogge Money for the Sommers Islands colony has vexed numismatists and historians for centuries. My esteemed colleague and fellow numismatist and researcher, Max Spiegel, has clearly articulated his arguments¹ for someone who had the means, political connections, and motive to have produced them. Max argues in favor of Charles Anthony, the chief engraver at the Royal Mint in London from 1599 to 1615 as the minter of Hogge Money. As chief engraver, Max theorized he would have enjoyed all the connections he needed to privately produce a coinage for the Sommers Islands Company. As an investor/member of that company, he would also have enjoyed personal connections to the other Adventurers of that Company, and motive to advance their causes including support for the joint stock.

I agree with Max: Charles Anthony *could* have produced the Hogge Money. So could any number of other people in England at the time. Max's case is based on solid research, but circumstantial evidence. Given the lack of primary records to prove their origin, circumstantial evidence is all that one has upon which to base their argument when it comes to Hogge Money. My argument will be much the same as Max's. It will be based on a preponderance of circumstantial evidence. If you were hoping for the proverbial smoking gun, I apologize in advance for disappointing you. Having stated that significant caveat, I believe there exists a better qualified candidate who had all the requisite skills, political and business connections to have privately created a coinage in 1615. A man who literally grew up in and around coining operations because his father was employed as a mint master. A man who, as an adult, actually ran a mint rather than just engraved dies for a living. A man who was the only person in England at that time to have demonstrated his ability to tin-dip copper coins on a large scale. A man sitting on almost two and a half tons of prepared copper sheets. A man who was unemployed when the Sommers Islands Company was looking for someone to make their tokens. A man looking for redemption: Gerard de Malynes.

This man's life intersects the history of coinage in what would become 3 different countries: Great Britain, Bermuda, and the United States of America. His coins failed miserably in his native England, but formed the backbone of commerce in both the James Towne and Sommers Islands colonies.

The Quest Begins!

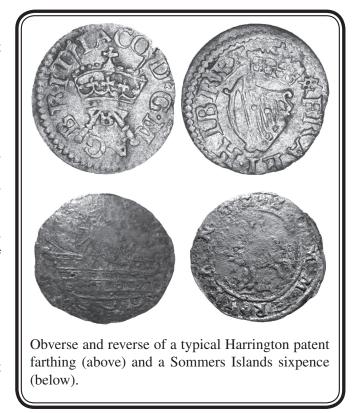
The origin of Hogge Money has long been a mystery. Speculation has run the gamut from a moonlighting mint worker, to a shadetree blacksmith hammering them out. Implicit in such speculation was that the original mintage was very low, and so anyone with a passing knowledge of metalworking could have hammered them out. Thus, the original pool of suspects for who could have made them was dauntingly large. When faced with such a challenge, it is useful to search for exemplars —anything that one could use to reduce the pool of candidates. With the case of Hogge Money, there is a useful contemporary exemplar: the patent farthings of King James I.

Superficially, the Harington and Lennox farthings bear a strong architectural design similarity to Hogge Money. Both feature a beaded border, legends around the perimeter just inside the <u>beaded border</u>, and central devices. This strong design resemblance may be a coincidence, or it 1 Max B. Spiegel, "The Somers Isles Hogge Money: A Theory About Their Mysterious Origin," *CNL*, Vol. 49, No. 2, Serial No. 140, Aug. 2009, p. 3435.

could hint at a common origin. The top illustration shows the obverse and reverse of a Harington patent farthing. The bottom illustration, for comparison's sake, shows the obverse and reverse of a Sommers Islands sixpence.

similarities The between the patent farthings and Hogge Money extend beyond mere appearance. They were made approximately contemporarily. Harington's Token House operated from August 1613 until June 1614. Hogge Money were likely made in the second half of 1615. Both were made of pure copper. More significantly, some examples of each were treated to a hot tin dip to impart the appearance of silver—a more valuable metal.

There are some important differences, too. Patent farthings were made on roller presses whereas Hogge Money has been conclusively proven to have been



hand-hammered. Both were relatively thin, although the patent farthings are literally paper-thin. Their thinness is remarkably consistent throughout the span of production. Hogge Money, on the other hand, shows almost no constancy of flan thickness. Numismatists have long known about this inconsistency, and have applied generic descriptors such as "thin" or "thick" flan to attribute them. This inconsistency of thickness translates into a wide range of weights across known specimens: something that a serious moneyer would not have allowed to occur.

The strong similarities between these two contemporary issues begs scrutiny. As one studies both issues, one realizes that the similarities are not a coincidence: their histories are literally as intertwined as the histories of James Towne and the Sommers Islands colonies.

Gerard de Malynes: Monetary and Economic "Visionary"

Allow me to introduce you to Gerard de Malynes, aka Gerard de Malines, Gerard Malynes and Gerard Malines. Gerard de Malynes was born in Antwerp around 1551; the son of an English mint master from Lancashire. Gerard and his family returned to England approximately 1561, ostensibly as part of the massive immigration from Europe's Low Countries to England to escape the political upheaval and religious persecution under King Phillip II of Netherlands and Spain. An obviously intelligent and educated man, he built a reputation for his knowledge of international commerce and rates of exchange. In fairness, he was something of a contrarian in his day, and his opinion was seldom consistent with the majority view. Thanks to his personal experiences (including his time in debtor's prison), he formulated strong opinions regarding the unfairness of unregulated foreign trade. He was adamant that England, and its people, would be better off if true and fair rates of exchange were established with its foreign national trading partners. Failure to do so, de Malynes believed, created an opportunity for individual English

traders to be cheated, with the result that hard English money would drain out of England. This would be a lifelong theme for de Malynes: unfair or unregulated exchange rates with foreign currencies would result in the loss of precious metals and adversely impact the working poor of English society. In some small way, de Malynes thought processes may have helped establish the foundation for mercantile colonialism, i.e., creating captive mercantile colonies that would result in hard currency flowing *into* England.

In 1600, de Malynes was appointed one of the Commissioners on the Privy Council. This august body was responsible for establishing exchange rates for international trade.² De Malynes' contributions in this capacity are mixed, at best. His opinion seldom was in concordance with the majority although it appears the King continued to respect his opinions. For example, he is recorded as giving evidence to House of Commons on the Merchants' Assurance Bill (November and December 1601).

Gerard also participated in various initiatives to develop the Kingdom's natural resources, including its metal ores and textiles, while still striving to shore up the value of England's currency internationally.³ These schemes may not have been well-planned or executed, and failed leaving de Malynes more embittered about international trade. His regal connections appear to have saved him from yet another stint in debtor's prison as he was granted royal protection against arrest in 1607.

Despite his personal financial setbacks, he apparently continued to enjoy political favor and was appointed as Assay Master to the Royal Mint. In 1609, he was appointed Commissioner on Mint Affairs. In 1612, he championed the cause of supplying a circulating low-value coinage ostensibly to stimulate commerce although it seems clear that the real purpose was to prevent low-value specie from being exported due to international commerce.⁴ Private traders had been making farthing tokens in lead. With Gerard de Malynes whispering in his ear, the King recognized that he had an opportunity to turn this situation into a profit by sanctioning the private manufacture of Regal farthings. In fairness, this was not de Malyne's brainchild: many others had also seen the wisdom of supplanting lead trade tokens with a regally-sanctioned copper token, and had actively lobbied the King for permission.5 The key to success would be obtaining a patent from the King granting a legal monopoly on the production of such tokens. It appears that de Malynes' lobbying of the King bore fruit around the end of 1612 or beginning of 1613. Unfortunately, for all his intellectual capability, and command of monetary and economic principles, de Malynes was not then a wealthy man. While he may have descended from a wealthy and educated family, his judgment did not allow him to sustain such wealth. In fact, he had been incarcerated in a debtor's prison from 1610 until 1612 thanks to a business deal that soured back in 1592 when he tried to invest in a salvaged Spanish ship.6 This experience embittered him toward wealthy merchants, and convinced him of the unfairness of international trade. If he were to realize his vision for defending England's supply of specie through the introduction of base metal tokens, he would need an investor.

² Inglis, R. H., Dictionary of Political Economy (1901 ed.) Page 677.

³ De Malynes, Gerard, A treatise of the canker of Englands common wealth Deuided into three parts, 1601

⁴ De Malynes economic theories drove his life's work, and were ultimately published in a variety of treatises including *The Maintenance of Free Trade* (1622) and *Consuedo vel Lex Mercatoria* (1622). 5 Everson, page 5.

⁶ Fonseca, Goncalo L., History of Economic Thought website. http://www.hetwebsite.net/het/profiles/malynes.htm

John Harington: A Useful Foil

There were at least two parties interested in obtaining the Patent to privately manufacture farthing tokens. The two most significant were: John Harington the Baron of Exton, and Lodewiche (also variously spelled Ludovic or Ludwick) Stuart, second Duke of Lennox. Lodewiche Stuart has come to be known simply as Lennox even though that is not his name. For the sake of avoiding confusion, I will adhere to that convention throughout this article. Arguably, Lennox had much deeper pockets and was better situated to make this venture successful. Lennox saw the potential in minting patent farthings, and actively lobbied the King for the patent. As would be later demonstrated, he was committed to its success.

Harington, on the other hand, had no demonstrable experience or interest in moneying. He did, however, have a keen interest in making money. Toward that end, he had curried the favor of King James by looking after his daughter, the Princess Elizabeth—and her spending habits.⁷ The Princess enjoyed unconstrained shopping sprees. Merchants were all too willing to supply the daughter of the King with whatever she fancied. Sadly, those merchants also expected to be paid for their wares. As a result, she continuously rung up significant debts wherever she went. Harington was "happy" to cover them with the expectation that the King would reimburse him either monetarily or politically. Perhaps this was the reason why King James awarded Harington the patent—a political favor in lieu of compensating Harington for the Princess's debts.

Regardless of the reason for the King's decision, in Harington, de Malynes found the perfect foil for his plans to privately manufacture base metal tokens. Harington *needed* de Malynes if his Patent was to bear any fruit at all and both men knew it. For de Malynes, this venture meant more than just an opportunity for self-enrichment. Given what we know of his seemingly continuous struggle with indebtedness, his ambitions may have been limited to just solvency! This was an opportunity to validate his economic theories.

King James awarded the Patent to Lord Harington on 19 May 1613. Harington struck a deal with de Malynes, John Couchman, and William Cockayne. Harington would assign the Patent to them in exchange for a bond or payment, and they would run the Token House. Cockayne soon bowed out, as he was unhappy with the terms of the deal as awarded by the King. In fairness, Cockayne's misgivings likely arose as King James kept modifying the terms of the deal. Initially, de Malynes had convinced the King that there was money to be made in an arrangement that would facilitate commerce in the Kingdom. Even better, the King would profit without having to risk any of his own money or precious metal reserves. All the risk in this venture would be completely borne by whomever was granted the Patent. The King could literally just award the Patent and then collect his royalties regardless of whom he granted it to. De Malynes had presented the King with a failproof scheme to make money for nothing, as the old song goes. If that was not enough; granting the Patent to Harington would enable King James to absolve himself of his debts to Harington. A political favor could be more valuable than cash, especially if that favor took the form of a Patent that granted the Patentee a monopoly on something that could be used to generate profits.

Exactly what de Malynes whispered in the King's ear is not recorded. We do know, however, that the story kept changing. Perhaps to assuage the King's misgivings about the venture, or to mitigate concerns brought on by delays in starting production (which the King would

⁷ The Bodleian Library holds a letter from the first Lord Harington to Julius Caesar concerning Princess Elizabeth's finances.

⁸ Everson, Tim. *The Galata Guide to The Farthing Tokens of James I and Charles I.* 2007 by Galata Print LTD. Page 68.

translate as deferred royalties), de Malynes likely kept exaggerating the profit potential of this scheme. Keep in mind that de Malynes was invested in this venture: not just monetarily, but intellectually. Besides his personal quest for financial solvency, he sincerely believed in his purpose: a successful patent farthing could stem the flow of gold and silver out of England. It had to succeed!

Initially, de Malynes convinced the King that there was the potential for £35,000 profit per year in privately manufactured copper tokens. The King magnanimously agreed to split that profit equally with the Patentee. The tale grew taller as the delays grew longer. Eventually, de Malynes re-estimated profits from this venture at £60,000 per year. The King sensed he may not have extracted the maximum benefit from the arrangement. He retroactively modified the deal to cap the Patentee's profits at £25,000 per year regardless of how much was actually made. Perhaps King James did not understand how this would fail to stimulate production. More likely, he didn't care. Regardless, the King's renegotiations strained the partnership. Cockayne likely realized that capping the mint's "take" at £25,000 did not bode well for the future of their venture.

After Cockayne's departure, Simon Chambers was recruited as a replacement for Cockayne. On 6 August 1613, Lord Harington accepted a £9,000 bond from de Malynes, Chambers and John Couchman to operate the patent. Chambers' role in the Token House is unclear, although there is a record of Chambers rechanging patent farthing tokens for Regal silver coin. In theory, the shared bond made Chambers, Couchman and de Malynes equals –partners in the operation. The farthings would come to be known as Haringtons by numismatists generations later, but make no mistake: this was de Malynes' show. Gerard de Malynes was the mint's master and assayer. He may have even functioned as the engraver as no employee with that skill set appears in the mint's employment records. As mint master, he was responsible for hiring the 30 or so workers needed to operate the mint's various functions. Perhaps not surprisingly, he hired people he could trust. Peter de Malynes (Gerard's brother) was employed as the Keeper of the Counter Books. His other brother, Samuel, was hired as the Overseer of the Workmen. Yet another brother, Arthur, became the Keeper of the Warehouse for Copper. The de Malynes family literally ran the entire operation. Harington was the absentee landlord who financed the operation.

The elder Harington passed away on 23 August 1613. Even though he had been awarded the patent months earlier, he did not get far beyond the planning stage before he died. In fact, he (through de Malynes) had only just hired his production team effective 4 August 1613, and placed an order for the roller presses on 6 August 1613. It would have been miraculous for the presses to be delivered, set up, work men trained, and production to have begun within the 17 days remaining in Lord Harington's life. A much more likely scenario is that production at the Harington Token House began under his son's direction.

⁹ Julius Caesar Papers, unpublished but held in the print collection of The British Library. *The Present State of the Business of Farthing Tokens and how it hath been Proceeded in from the Beginning*, dating to approximately 1613–1614. Julius Caesar was the Chancellor to the Exchequer to the King from 1606 to 1614. The King was concerned that profits weren't being generated as robustly as expected, and Julius was keeping a weather eye on the Harington Token House to ensure the King wasn't being cheated out of his fair share. Given that de Malynes appears to have been the one to motivate the King to act on the growing sense of need for patent farthings, the slow start under his management of the Token House must have been alarming. Perhaps de Malynes kept increasing his estimate of potential profits to appease an increasingly impatient King!

¹⁰ Everson, Page 67.

¹¹ Ibid.

¹² Ibid.

The second John Harington was an intelligent, sensitive, and educated young man fluent in at least three languages. Despite his obvious intellect and formal education, he did not have any practical experience or education in metallurgy or manufacturing. Reeling from his father's death, and stung by the magnitude of his inherited debts, the second John Harington seized upon the Token House and Patent as a means of escaping from his inherited predicament. He ramped up production in earnest.

Initial production of Harington's farthings was treated to a hot tin dip to make them appear to have been made of silver. No records exist to prove whose idea the tinning was, but looking at the personnel involved in the mint's early days, it could not have been anyone other than Gerard de Malynes. The mint employed copper scourers, copper cutters, a copper forger, and two blacksmiths. His brothers all had different management or accounting skills, the first Lord Harington was out of the country for the entire time he owned the Patent, and the second Lord Harington knew nothing about moneying other than it was his only hope for escaping his inherited debt.

Gerard was keenly aware that this experiment in base metal tokens could validate his economic theories on international trade and monetary exchange rates. He was also keenly aware that England, at that time, enjoyed a bullion-based economy and monetary system. People trusted that their coins were valuable because they were the King's wealth: valuable metals such as silver and gold taken from the King's treasury, and stamped with the King's visage and/or other Regal indicia. Yet, making another coinage in silver would only serve to further hasten the draining of silver from the Kingdom.

Copper was considered a base metal—not an acceptable material for Regal coinage in England. The King's subjects were accustomed to Regal coinage made from precious metals. Although lead had been used successfully for trade tokens, it remained to be seen how the public would react to Regally-sanctioned copper farthings. No records exist that explain why the first Harington patent farthings were tin-dipped. Perhaps tinning was De Malynes' attempt to make humble copper coins appear to be intrinsically valuable. They would have been almost the same size and color as a silver coin. Regardless of motive, the added expense of tinning was likely factored into the cost of production, resulting in a coin so small that some later speculated it was intended as a half farthing. Its tiny size made it impractical for commerce. Halting the application of tin to the farthings reduced the cost to manufacture a farthing, but did nothing to improve their acceptability. The Token House was stuck because their machinery and stock of dies were intended for the small-sized farthings. Tinning, therefore, was a costly tactical error with grave strategic consequences.

The tinning fooled no one. It added time and cost to production. Returned farthings couldn't be sold back to their braziers for recycling. Worse, the entirety of the Token House was geared toward manufacturing small flan tokens: the mistake was not easily or inexpensively corrected. This must have been a bitter lesson for de Malynes. His economic theory about enriching the Crown by limiting exports of precious metals and resources through the use of base metal low-value tokens was solid. His tactic in validating that theory was flawed. He was discouraged but, as we will see, he would get an opportunity for redemption.

¹³ Ibid. .

¹⁴ Peck, C. Wilson. *English Copper, Tin and Bronze Coins in the British Museum 1558–1958*. (British Museum, London,1960), page 24. Peck addresses the confusion caused by the small flan Harington farthings. Weightman and Snelling both believed them to be half farthings despite the Patent clearly authorizing farthings. It is clear that de Malynes' intention, from the start, was to make a small farthing that people could believe was made of silver.

If de Malynes was learning bitter lessons from his time at the Harington Token House, they were all learned at the expense of the Harington family. Young John Harington must have quickly realized that his father—and by extension, he himself since debt was not discharged upon death in those days—was in over his head with the farthing venture. He may have even felt that de Malynes had deceived his father into believing this could be profitable. Harington agreed to sell the patent to Lennox to extricate himself from his inherited debts in December 1613. De Malynes intervened and quashed the deal. This was a Pyrrhic Victory for de Malynes. Young John Harington desperately needed cash to cover his father's debts (much of which was incurred by the Princess Elizabeth) and couldn't afford to keep the Token House operating. After his failed attempt to sell the Patent, he was forced to sell his lordship on 18 February 1614.

Young John Harington could not have appreciated Gerard's interference in his business affairs, and must have been humiliated by the loss of his title. He fired Gerard, but was forced to repay his bond. Not having enough cash, and perhaps appreciative of the irony, he did so using the mint's stock of farthings and raw materials. Just nine days later after selling his lordship and firing de Malynes, young John Harington passed away on 27 February 1614. No record exists of the cause of his death, but one must acknowledge that Junior was just 21 at the time of his death, and he was clearly angry and despondent at the circumstances resulting from his father's death. Harington Junior was also still quite distraught at the death of his dearest friend, the Prince of Wales, who had passed 6 November 1612. Just nine dearest friend,

There appears to have been a dramatic drop-off in production for approximately 10 weeks after Junior's death, with just 78,960 farthings being made between 27 February and 7 May 1614. That is an average production rate of less than 1,500 farthings per day assuming a 6-day workweek. Production then ramped back up for the balance of May 1614, showing production between 20,000 and 25,000 farthings per day. A total of approximately 400,000 small flan farthings were made during Lady Harington's control of the Patent. This disparity in production rates is generally attributed to the chaos in the days after the young Lord Harington's death, but it seems much more likely that paying off de Malynes severely depleted the Token House's stock of prepared copper.

Lady Ann Harington, wife of the first Lord Harington and mother of the second, was formally confirmed as the Patent owner on 21 June 1614. Obtaining clear title to the Patent was necessary for her to dispose of it legally. Although there is no further record of the transfer of ownership of the Patent until 1616 (upon the expiration of the original 3-year term of the Patent), Lady Harington sold, leased or otherwise transferred control of the Patent just one week later, on 28 June 1614.¹⁸

¹⁵ Everson, Page 68. There is a discrepancy in the discharge of the bond. The first bond de Malynes paid was for a total of £2,000 which he shared with Cockayne and Couchman. The second bond was for a total of £9,000 shared between de Malynes, Couchman and Simon Chambers. Either this bond wasn't shared equally, or young John Harington could only muster up £2,500 as partial payment to discharge de Malynes bond.

¹⁶ Young John Harington's relationship with Henry Frederick, the Prince of Wales was by all accounts special. They met in school and instantly became inseparable. Lord Harington sent his son away for a few years to culture him, and possibly isolate him from the Prince. Young John generated a steady stream of letters in French and Latin to the Prince, and proclaimed he was returning soon via Paris so they could spend the rest of their days together. That suggests a relationship deeper than friendship. He took the Prince's death very hard. Taken in context with the other more recent tragedies in his life (the mounting debt, failed tokenage, his father's death, being forced to sell his title) and the fact that he drafted a will days before he died, one must consider the circumstances of his death may have been deliberate.

¹⁸ The Royal Farthing Tokens, British Numismatic Journal, 1906, A.E. Weightman, Page 183.

Lennox's assumption of control of the Patent in June 1614 makes sense from a timing perspective, and is reflected in a change in the farthings themselves. Lady Ann's business records indicate she was cranking out between 20,000 and 25,000 farthings per day of the small flan farthings. In June 1614, production shifted to a redesigned farthing using a larger diameter and heavier flan. In practical terms, this was the first patent farthing intended to be a copper farthing rather than an underweight farthing with a layer of tin masquerading as a silver farthing.

A curious and important aspect of this design change was the omission of the Harington Knot from the legend on the reverse of the farthing. The family knot would never again be seen on a patent farthing. Such a change is a clear indication that the Harington family was no longer in control of the patent. This transition allows us to confidently date the start of production of large flan patent farthings to no earlier than June 1614.

With the Haringtons out of the picture, Lennox ran the Token House his way. Lennox did not, for example, retain the services of Gerard de Malynes. Having twice foiled Lennox's attempt to own the patent (once when King James first awarded the Patent to Harington, and then again when Lennox attempted to purchase the Patent from Junior) Lennox would have hired anyone but de Malynes for his Token House operation. The failure of the Harington tokens must have haunted de Malynes for years. It certainly ruined him financially—it would take him years to recover.

In March 1617,²¹ de Malynes complained to the King that, for his efforts with the Harington Token House, he was rewarded with £500 worth of prepared copper sheets, and £2,000 in small flan Harington farthings which never circulated widely²² and were especially unwanted after the larger flan Lennox farthings were introduced to commerce. Consider that £2,000 is 1,920,000 farthings! Even if they were small flan tokens, that's quite a pile of useless metal. Lord Harington Junior may have dutifully discharged his bond, but surely he exacted some measure of satisfaction in transferring ownership of so large a quantity of otherwise useless farthings to the man responsible for making them.

Total mintage estimates for the Harington small flan farthings has been estimated at between 3.9 and 4 million from August 1613 through June 1614 based on an analysis of copper purchased, copper scissel back to braziers, and average token weight.²³ The accounts at the time of the

¹⁹ Everson, Page 68.

²⁰ The first generation of large flan patent farthings are generally regarded as the second Type of Harington farthings, but it seems clear from my research that these were the first generation of patent farthings produced under the auspices of the Duke of Lennox. The only real connection to the Harington design was the continued placement of IACO centered at the top of the obverse legend. Subsequent issues moved that clockwise so that the I was punched at the 1 o'clock position, extending down to about the 3 o'clock position.

²¹ Everson, Page 6.

²² Small flan Harington farthings are generally accepted as a failure. Many towns and individuals refused them, or quickly returned them for proper sterling coinage. The venture also financially ruined both de Malynes and the Harington family. However, the small flan farthings did circulate prior to the introduction of Lennox's larger flan farthings, and appear to have served at least one important function in London. They often are recovered by London's myriad mudlarks plying their trade on the foreshores of the Thames. One could argue that only means people discarded them by tossing them into the Thames. However, the more successful mudlarks confide that the fare for a ferry crossing of the Thames was a farthing, and success when detecting for them increases when one knows where the ferry crossings were located. I have purchased several of these Haringtons recovered from old ferry crossings. They are virtually uncirculated, despite having lain in mud for 400 years.

²³ Everson, Page 68.

younger Harington's death indicated approximately 3,500,000 farthings produced. The fact that Harington would have had approximately 54% of the total production volume available in February 1614 to pay off de Malynes is quite revealing as to the scale of the failure of this endeavor. Equally revealing is that the farthings represented only 80% of de Malynes' bond. The other 20% was paid back in the form of £500 worth of prepared copper sheets. At the time, copper was worth 2 shillings and 2 pence per avoirdupois pound or 26 pence. At 12 pence per shilling, and 20 shillings per pound sterling, there are 240 pence per £1. That would mean that de Malynes was also repaid with over 4,615 pounds of copper sheets.

Ultimately, in 1619 de Malynes was again imprisoned in Fleet Prison for his debts. We know this thanks to a letter he sent to the King from prison on 16 February 1619 again blaming the late Lord Harington Junior for paying him in his own worthless tokens and leaving him destitute. All of this political and business intrigue simply demonstrates that Gerard de Malynes was well-connected politically all the way up to King James himself, and possessed all the requisite skills needed to produce a private coinage. This is not speculation: the coinage may be described as a failure, but de Malynes successfully produced them. He was the brains of the Harington Token House, and oversaw every aspect of its operation. He was also the only person with the motive to dream up the idea of tinning a copper coin to make it appear more valuable. Perhaps more salient are the facts that de Malynes was destitute after being fired by Lord Harington Junior, and was saddled with almost 2 million worthless Harington farthings and tons of prepared copper.

Redemption in the New World

De Malynes' crippling failure with the patent farthings left him financially destitute, with "assets" that were not readily monetized. He could, in theory, have sold the prepared copper to a brazier to cash out of that asset. Based on the business records of the Harington family, scrap copper would be purchased by braziers at just 9 pence per avoirdupois pound.²⁴ Thus, de Malynes' £500 in prepared copper would be whittled down to about £170 if he tried to sell them back to a brazier. Only a desperate man would take that deal. Clearly, there was a better way to monetize his copper.

Like so many of his countrymen, The New World would offer de Malynes a chance at redemption. It would also present him with a pair of opportunities to monetize Lord Harington Junior's "farewell present" to him, making him the most important moneyer to the New World that you have never heard of.

James Towne: The First Opportunity

The James Towne colony was founded in 1607 with the construction of James Fort. Its history is well-documented with surviving Virginia Company records, contemporary correspondence, and Captain John Smith's *Generalle Historie* published in 1624. Its story has been explored, documented, and re-told from virtually every angle one could imagine. Except for one! It's only recently that archaeological evidence has emerged that strongly suggests that James Towne had a circulating currency based on a mélange of English, Spanish and other foreign coins.

The first indication that suggested James Towne had a circulating currency came in 1970 during Dr. Ivor Noël Hume's archaeological excavation at Martin's Hundred. Martin's Hundred was a satellite plantation just outside of James Towne, established in 1619. It was attacked and destroyed during an Indian Massacre in 1622. While excavating the perimeter of the fort's defenses (specifically, the loam step behind the palisade which afforded soldiers inside the

fort a heightened vantage from which to shoot at intruders), Noël Hume's team found a small flan Harington farthing.²⁵ Picture 11-5 in Noël Hume's book shows that they found a tinned Harington type 1a farthing with an A privy. Hume noted that the tinning was still quite evident, and that although the coin suffered loss of mass due to environmental damage, its design features and tinning actually showed very little sign of wear.

Noël Hume was shocked at the implications of this find: a rare specimen of a failed coinage showing very little circulation wear, was found thousands of miles away from where it was issued, dated archaeologically to a fort that was built six years after the farthing failed as a circulating medium. This caused Noël Hume and his team great difficulties trying to make sense of this odd discovery. Was it someone's lucky pocket piece? It is difficult to imagine anyone choosing so small a coin for that purpose. Did it fall out of someone's pocket while they were laboring away building the stockade? Possibly, but a single specimen does not constitute nor confirm a circulating currency. Besides, the small flan Harington farthings failed so quickly and completely that it was inconceivable that any stayed in circulation long enough to see James Towne. The lack of circulation wear on the found Harington farthing also strongly argued against its having been in circulation for the years intervening its manufacture and subsequent loss at the fort.

Noël Hume theorized that a quantity of the Harington farthings had lain in storage and were deployed in James Towne years later.²⁶ Noël Hume also noted that he had no evidence to support this theory, and that not all members of his team agreed with his theory. We now know that only one person held such a supply of uncirculated small flan patent farthings: Gerard de Malynes. Thus, Noël Hume's theory was solid and based on fact but, finding one solitary specimen is not indicative of a circulating coinage.

In the autumn of 1980, Noël Hume was still cataloguing all the artifacts exhumed from Wolstenholme Towne in the Martin's Hundred plantation. While cataloguing counters found in Wolstenholme, researchers realized that one of them was not actually a counter. It was the wrong size. One side was completely lost to environmental damage. What little remained of the other revealed the central devices of the Harington farthing obverse. It showed no evidence of having been tinned. This farthing had been found inside the Company Compound in 1978, at the edge of the potter's pond.²⁷

All totaled, there were just three coins found within Martin's Hundred. One was a cut Spanish coin and the other two were both small flan Harington farthings. Although, as Noël Hume so aptly noted, the percentage is skewed by the small sample size, one cannot ignore that the failed Harington farthings apparently did function as a medium of exchange in Virginia's earliest colony.²⁸

In the years following Noël Hume's research, archaeological research has continued at various James Towne historical sites, most notably by Dr. Beverly (Bly) Straube, who has kindly shared some of her research notes with me. Dr. Straube has documented a wide variety of coinage from around the world found archaeologically in various sites in and around James Towne. The coinage was a mélange of international coins, spanning over 250 years. Some coins were obviously not contemporary with James Towne, and must have been deposited many years afterward.

²⁵ Noël Hume, Ivor, Martin's Hundred, (Alfred A. Knopf, 1982, NY) pages 224-226.

²⁶ Noël Hume, Page 317. Noël Hume complains politely that although he believed this was a solid theory, he could find no documentation nor any numismatic scholar willing to support his thesis. Although somewhat belated, I support Noël Hume's thesis.

²⁷ Hume, Page 318.

²⁸ Ibid.

Of the 77 total coins found archaeologically within the various James Towne contexts, one could argue that 51 were original to their discovery context. Of those 51 coins that either predated or were contemporary to the James Towne settlement, 16 are small flan Haringtons. That's 34%! Dr. Straube's findings establish beyond a reasonable doubt that there was, indeed, a circulating coinage in James Towne and that Harington farthings were an important part of it. That's both remarkable and ironic given how quickly and completely these coins failed in England. They were completely removed from circulation by the summer of 1614, yet mint-fresh specimens appeared in quantity on the other side of Atlantic a few years later. A logical explanation, as Noël Hume suggested, is that the Company acquired a supply of them for the colony.

There are no records to indicate who supplied James Towne's colonists with the Harington farthings. However, it seems highly probable that it was de Malynes. He possessed enough small flan farthings, including both tinned and untinned, to satisfy the needs of several towns. He was left financially ruined by his venture with the Haringtons, and ended up in Fleet Prison for his indebtedness by circulating coinage of Harington farthings at James Towne. There are no other recorded hoards of Harington farthings—if the Company did acquire a supply of them, they could only have come from de Malynes or someone that may have purchased them from him. Regardless of how de Malynes liquidated his holdings, it was not enough to keep him out of debtor's prison.²⁹ He was forced to accept them at face value from the young John Harington, but it seems highly unlikely he would have able to sell them as dearly.

The Sommers Islands: The Second Opportunity

The Sommers Islands, now called Bermuda, was accidentally settled by the English when Admiral Sir George Sommers and his passengers and crew were stranded there. They were part of a relief mission that departed Plymouth, England on 2 June 1609 to resupply James Towne. As they neared the New World, a hurricane struck their convoy. Their ship began taking on water and, to save the ship, the able-bodied men took turns bailing for three days and nights. After that time, the storm was beginning to subside, and they could see land on the horizon.

They made it to Bermuda: the fabled Isle of the Devils. Mariners had used it as a sea-based reference point for centuries but avoided it because they believed it to be inhabited with devils. Sommers and company discovered the devils were not devils at all but a vocal nocturnal bird, and the islands were quite beautiful and lush. If there was a problem, it was that there were only two navigable approaches to the archipelago's inner harbors.

It took the stranded men approximately nine months to effect their escape from the island via two small ships they built with local timber and what could be salvaged from the Sea Venture. These two new ships, the *Patience* and the *Deliverance*, set sail for James Towne on 30 March 1610 to complete their original relief mission. Two men stayed behind to claim the land as England's newest colony. They were sailors—Sommers' men—Edward Waters and Christopher Carter and would make continuous the unintended habitation of the *Sea Venture*'s passengers and crew.³⁰

Sommers would not live long enough to return to England, but various members of his trading company did, including his nephew Captain Matthew Sommers. They brought word of a lush tropical paradise with more food and natural riches than anyone could hope for. The surviving members of Sommers' company quickly raised funds to establish a permanent colony. The arrival of the *Plough* on 11 July 1612 established the Isle of the Devils as a formal and

²⁹ Everson, Page 6.

³⁰ Smith, Captain John, *The Generalle Historie of Virginia New-England, and the Summer Isles*, (1624, reprinted by the Southern Classics Library, 1982) page 175.

permanent English colony. The *Plough* brought supplies and 50 settlers and the Company's first Governour,³¹ Richard Moore. Moore quickly realized that the island offered considerable resources including fish, birds, and hogs³² to sustain his nascent colony. Apparently freed from the burden of guaranteeing a food supply for his colonists, Moore undertook an ambitious construction program to develop the civil infrastructure the colony needed. While there were no potentially hostile natives, the island was a well-known navigation marker for ships from nations hostile to England. Forts were needed, as were bridges, roads, warehouses, churches, docks, etc. Moore's Commission letter dated 27 April 1612, stipulated that labors on behalf of the general good would be compensated via a base-metal coinage to be delivered with the next supply ship.

The problem was that the owners of the mercantile company (known as Adventurers) were more interested in extracting wealth from their colony than they were sending resources to it. Worse, the Adventurers continued to suffer major financial losses from their investment in the James Towne colony. In 1614, they relinquished their patent rights to the Sommers Islands back to the Crown. Amidst all this financial strife, one can understand how a promised base-metal coinage would be the least of their concerns. Finally, on 16 May 1616, Governour Dan Tucker arrived aboard the supply ship *George*, and introduced the coinage. Although this coinage had been promised for years as compensation for work performed on behalf of the general good, the Company ultimately introduced it as an alternative to their new Joint Stock plan. Joint Stock essentially offered farmers the opportunity to participate in shared profits. This was an option plan, but the Company really wanted it to succeed. Those opting out of Joint Stock could be compensated in cash, although to the chagrin of the colonists, the coinage was not any legal tender they recognized. It was a copper token with a pig on one side and a crude ship on the other. The inhabitants of Sommers Islands derisively called it Hogge Money.³³

The coinage circulated under duress until 1619 when the colonists tricked Tucker into returning to England.³⁴ The hoggies all but disappeared, save for some literary references by Captain John Smith, and some company records. Slowly but steadily over the course of the intervening centuries, they have crept back onto the "radar screens" of numismatists, historians, Bermudians, and Bermudaphiles.

Today, Hogge Money is a quixotic and compelling coinage, replete with mysteries and contradictions. For example, the crudity of its design and dies betrays a semi-skilled die-sinker. Yet, Heidi LeSeur's metallurgical research on the Castle Island specimens proves that hoggies were struck using remarkably pure copper.³⁵ The copper's purity could have just been the way it was supplied to the minter, or it could have been ordered that way. Regardless, one is challenged with reconciling the sophistication with such primitiveness evident throughout this issue. Another striking (pardon the double entendre) contradiction is that the minter possessed the metallurgical sophistication to impart an artificial silver appearance to some of the coins via a hot tin dip yet could not seem to keep thickness consistent throughout the production run. Fortunately, there is a very simple solution that resolves both of these mysteries. There are also, however, very complicated potential explanations that only serve to raise other questions.

³¹ Governour is the antiquated form of Governor, but is spelled this way in all primary documents. As it is a formal and functional title, I will adhere to the original spelling.

³² All primary reference sources use the old English spelling of hogs: hogges. It was not uncommon for ships crossing the Atlantic to bring livestock aboard to provide fresh meat for the journey and/or for breeding in far-flung lands.

³³ Lefroy, Governour Sir J. H., The Historye of the Bermudaes, (Hakluyt Society, London, 1882) pages 76. 34 Lefroy, Governour Sir J. H., Memorials of the Bermudas, (Eyre and Spottiswoode Limited, London, 1932 reprint) pages 143–144.

³⁵ Bermuda Journal of Archaeology and Maritime History 10:6–7. 1998, Heidi LeSeur "Hogge Coins from Castle Island"

For example, the Bermuda Monetary Authority's theory about three strikings,³⁶ or minting batches, attempted to explain the discrepancy in thickness as well as the tinning. The three strikings theory assumes that hoggies were made in three batches, with each batch being made heavier or fancier to overcome public resistance to the coinage. The theory holds that the first batch was on thin flans. The second batch, ostensibly based on negative feedback from the colony, was made on heavier flans to make the coins more intrinsically valuable. The final batch took the unprecedented step of treating the struck copper coins in molten tin to make them appear to be made of silver. This is a logical, but complex attempt to explain the physical variety found in hoggies.

Ordinarily, a moneyer would take great pains to regulate the weight of coinage as that would directly affect the value of the coin and, consequently, the general public's trust in their value and/or willingness to accept them. Unless, of course, something unusual was going on. A simpler alternative theory is that the coinage was being minted under less than ideal conditions that made traditional quality control impossible to administer. For example, the moneyer simply used whatever stock he had, without attempting further processing to regulate thickness and weight per coin. Such a scenario neatly fits with the crudity of the Hogge money's dies and manufacture method. It also fits neatly with their intended use as a token: if they contained their face value worth of copper, they would not have been tokens!

When faced with multiple competing hypotheses such as these, the challenge becomes determining which is most probable. Under such circumstances, Ockham's Razor,³⁷ also known as the Law of Parsimony, has proven its value over the course of many hundreds of years. Ockham's Razor holds that among competing hypotheses the one with the fewest assumptions should be selected, and is most feasible. The theory of the three strikings is certainly a complex theory, requiring many supporting assumptions including that the variance in thickness and weight was deliberate, willful, and iterative.

A noteworthy flaw with the three strikings theory is that it assumes the Sommers Islands Company was so committed to a circulating coinage that they would doggedly pursue it despite two unsuccessful and increasingly expensive attempts. Knowing how bitterly the Company fought over having to supply the colony with even bare necessities, that seems completely out of character for them. The theory also assumes that two shipments were undocumented even though the first one was. Lastly, we must conveniently overlook that fact that three minted batches, would stretch over a couple of years without a surviving shred of documentation.³⁸

Alternately, we could accept a simpler theory that suggests Hogge Money was a crude and relatively inexpensive attempt at propping up the Joint Stock. If it worked, great. If not, move on. William of Ockham would not have selected the theory of the three strikings as the most plausible.

In addition to attempting to explain the presence of thick and thin flan hoggies, the Three Strikings theory also attempted to address the tinned hoggies. It does not, however, attempt to

³⁶ Coins of Bermuda, Williams et al, pages 43–44. Published by the Bermuda Monetary Authority, 1997 37 William of Ockham lived from 1287 until 1347. He was an English Franciscan friar, a noted scholar and philosopher. His Razor was developed as a means of developing theoretical models through heuristics. Over time, Ockham's Razor has been repurposed as a test for plausibility between competing hypotheses. 38 Minting time would have been nominal; the real hold-up in this disjointed process would be the time delay for communicating between Bermuda and England. Records show that one-way transit times could take a couple months. A ship would need to offload cargo, victual, and make ready for the return. This, too, would add time to the communication needed to coordinate a protracted attempt at introducing a successful circulating coinage.

identify the maker of Hogge Money. The source of Hogge Money has always been shrouded in mystery, owing to the lack of any documentation proving its origin. All we have from the primary records of Bermuda's colonial era is that it was introduced by Governour Dan Tucker in May 1616 upon his arrival in the colony. Working backward from this date can give us an approximate time frame for the minting of Hogge Money. Given an approximate six to eightweek journey from England, a few weeks to outfit and victual the ship prior to departure, and allotting time for planning and financing the journey, Hogge Money was likely made in the second half of 1615. It had been promised to the colonists as early as 1612 as payment for labor performed for the general good of the colony. Gerard de Malynes was available for hire, and equipped with tons of refined sheet copper, as of March 1614.

Adhering to Ockham's requirement for simple theories, while striving to resolve the cause of thick, thin, and tinned flan Hoggies leads us directly to Gerard de Malynes. The years following de Malyne's termination by the second Lord Harington were difficult for him, as evidenced by his pleas to the King, and eventual incarceration in a debtor's prison. By 1622, he would be back on his feet and contributing to Society again. But, from February 1614 through at least 1620, he was in desperate financial straits.

The records do not indicate anything about the "prepared copper" that de Malynes possessed other than its value (which allows us to calculate volume) and that it was rolled into sheets. Both the patent farthings and Hogge Money were made of almost pure copper. The manufacturing methods were different: one was hand-hammered and the other was pressed through rollers. Even a cursory examination of extant specimens quickly demonstrates that the Harington patent farthings vis-à-vis Hogge Money specimens of any denomination are of very different thickness. Hoggies are relatively thin, but not even close to the thinness of a Harington farthing. Harington farthings are literally paper-thin. To make them on a roller press required the sheet copper to be rolled very thin. To get sheet copper that thin in 1614 would require multiple iterations through a rolling mill (not a roller press, which was used to mint the Harington and Lennox tokens), squeezing each sheet ever thinner. Given how production slowed dramatically after the second Lord Harington's death, it seems clear that de Malynes was paid off with sheets of copper from inventory that was in various stages of production. Id est, various thicknesses. That production continued at all in those turbulent days following Junior's death suggests Lady Harington retained some prepared sheet copper, most likely those sheets closest to being ready for production of the thin farthings. The fact that Hogge Money tokens of all denominations are noticeably thicker than Harington patent farthings seems to reinforce this theory.

If de Malynes was contracted to make Hogge Money, he would have done so without access to the sophisticated and expensive machinery that he previously enjoyed during his time with the Haringtons and earlier with the Royal Mint. In particular, de Malynes would not have had access to a rolling mill. During the pre-Industrial Revolution era, a rolling mill occupied 2 stories of a building, and was driven by a team of horses reigned to a carousel to drive a central vertical drive shaft.³⁹ Roller presses, on the other hand, were hand-cranked desktop affairs such as the Taschenwerk presses. If de Malynes had access to a rolling mill, he would have ensured his coins were of uniform thickness. Instead, he used the sheet copper he had, even if it meant coins were made that varied greatly in thickness and weight.

The value of copper relative to the face value of each coin would not have mattered to him—he was simply redeeming an otherwise illiquid asset, of which he had tons! His client, too, did not care about intrinsic value vs. face value: they simply wanted the cheapest possible token to satisfy those colonists who refused to participate in the Joint Stock. The result was an almost random

³⁹ Linecar, Howard, *Coins and Coin Collecting*, (The Hamlyn Pubishing Group, 1971). Pages 102–103, Figures 182 and 183.

distribution of thicknesses of coins struck. In theory, a detailed survey of surviving specimens could reveal whether or not hoggies made from the same die pairing, and approximate die state, varied in flan thickness. The fact that the vast majority of surviving specimens exhibit corrosion will impede this survey, and may even render the results inconclusive.

The presence of tinned specimens has also been nettlesome for numismatic researchers. It has never been conclusively proven whether the tinning was applied to sheet copper prior to striking, or if it was a post-minting process in which individual specimens were dipped in molten tin.

The only man in England at that time with both the experience and motive to tin-dip copper coins was Gerard de Malynes. He pioneered that technique with the Harington farthings, but those farthings failed to gain acceptance. For de Malynes, this was not a small failure. This was his attempt at proving that silver-appearing base metal coins had the potential to slow down the exportation of silver coinage. Perhaps he rationalized that the Harington patent farthings failed due to their small size. If so, the larger tokens required by the Sommers Islands Company may have afforded him a shot at redemption that he could not resist. Anyone else would have considered it an expensive lesson-learned, and moved on. Not de Malynes! He needed to validate his monetary and economic theories, some of which he doggedly pursued throughout his adult life.

It is highly doubtful that the Adventurers of the Sommers Islands Company would have stipulated tinned copper tokens for their colony. If it were stipulated, then all of them would have been tinned. Much more likely is that de Malynes seized this as an opportunity to again test his theory. Why only some tokens were tinned is a mystery that may never be fully resolved. Perhaps he ran out of tin, or the process was eating into his proceeds from the deal. Or, maybe the Adventurers regarded it is unnecessary. Alternately, he may have simply had some sheets of copper that had been tinned by the Harington Token House and used them as-is for minting Hoggies.

Ultimately, these small mysteries do not detract from the mountain of circumstantial evidence that points to Gerard de Malynes as the minter of Hogge Money. He had the requisite skills and political connections. Stylistically speaking, his Harington patent farthings bear a strong resemblance to Hogge Money. Plus, he had 4,615 pounds of pure copper sheets that he desperately needed to monetize. The Sommers Islands Company provided de Malynes with a convenient opportunity to generate some much-needed cash. In the process, the Company also gave him a rare opportunity for redemption by proving his theory about the benefits of base metal tokens.

Conclusion

William of Ockham would have been pleased to see how Gerard de Malynes made lemonade out of the lemons handed him by the second Lord Harington. Harington was duty-bound to repay his bond despite being cash-strapped himself. He did, indeed, repay de Malynes' £2,500 bond, albeit with illiquid assets. In finding creative ways to monetize those assets, Gerard de Malynes became an accidental moneyer to The New World. His unwanted farthings formed an important part of the James Towne economy. De Malynes' role in supporting the James Towne colony is only now coming to light, albeit indirectly, thanks to ongoing and extensive archaeological expeditions at the various historic sites that comprise the James Towne settlement.

Disposing of the copper sheets required a bit more creativity. I believe he was fortunate enough to find a buyer for at least some of his 4,600+ pounds of sheet copper in the Sommers Islands

Company. But they needed coins, not sheet copper. Thus, de Malynes was forced to mint coins again. The crudity of design, irregular flan thickness, and hand-hammered production method all strongly suggest de Malynes needed to keep production costs as low as possible and was operating without the more sophisticated machinery to which he was accustomed. Cost containment was certainly the Sommers Islands Company motto! While it is true that tinning added cost and complexity, de Malynes was uniquely motivated to prove his point about copper coins. Unfortunately, he underestimated the relative intelligence of his constituency—their perception of value ran deeper than a coating of tin.

Despite the second failure of de Malynes tinning experiment, he must have taken some solace in converting more of his copper holdings into cash. That he accidentally became a moneyer to the two colonies in the New World should have assured him a place in history. Perhaps it is time to rectify that oversight.

Slavery and Child Labor at the Connecticut Mint by Christopher R. McDowell; Cincinnati, OH

When looking back on the fight for freedom against slavery, Connecticut is often characterized as a progressive, friendly place, vital to thousands of slaves fleeing northward along the Underground Railroad prior to the Civil War. While there is truth to this story, there is also an ugly hidden past that is partially revealed when reading the 1788 Connecticut and Federal Mint Account Book, the transcript of which appears in this issue of *The Colonial Newsletter*. In 1788, the Connecticut Mint was under contract with the federal government to produce and deliver 300 tons of copper coins to the Board of Treasury in New York City. The Account Book records all of the income and expenses of the mint incurred in manufacturing the Fugio coinage, including the cost of wages for each employee, along with the worker's name, the number of days worked, and the salary received.

These records provide a unique opportunity to explore the inner-workings of a large scale pre-industrial manufacturing operation in America and analyze the wages paid to different classes of eighteenth century laborers. In 1788, thirty-four different workers received wages for day labor at the mint, this includes children, indentured apprentices, white unskilled laborers, white craftsmen, a free black man, and a slave. In a typical pay period, fifteen employees toiled at the Hamden copper works, the mill site about two miles outside of New Haven where the copper was processed into blanks, while three men stamped Fugio coins at the two screw presses. This essay will compare the wages received by the different classes of workers with an emphasis on how child and black labor was utilized to manufacture Fugio coins and how African Americans were treated in New Haven in 1788.

Slavery in Connecticut was in a state of transition at the conclusion of the Revolution. The ideals of the Enlightenment did not square with holding humans in bondage, yet slavery was legal to some degree in every state of the American Confederation in 1788.¹ In the late colonial period slavery flourished in Connecticut as the wealthy middle-class purchased slaves not so much for large scale farming, like in the South, but mostly as domestic servants. As a result of Connecticut's affluent middle-class more slaves lived there than anywhere else in New England at the start of the Revolution.² Most of the principal families of Norwich, Hartford, and New Haven were said to have one or two slaves, whom they called "servants." By 1774, half of all the ministers, lawyers, and public officials in Connecticut owned a slave, and a third of all the doctors.³ Many of the investors in the Connecticut Mint were also slave holders.⁴

¹ Some argue that slavery was terminated in Vermont in 1777, but Vermont was not a state in 1788 and there were 16 slaves shown as living there according to the 1790 census. New Hampshire claims to have abolished slavery in 1783, but in 1792 there were still nearly 150 slaves in the state. Only Massachusetts can make a colorable argument to having abolished slavery before the conclusion of the Revolutionary War, but some historians continue to argue that men were kept in bondage there after 1790. See, Elaine MacEacheren, "Emancipation of Slavery in Massachusetts: A Reexamination, 1770–1790," 55 J. NEGRO HIST. (1970), p. 304 n.3.

² It is estimated that 6,464 slaves lived in Connecticut on the eve of the Revolution. In 1790, the number of slaves recorded on the federal census for Connecticut was 2,764; by 1800 that number was 951.

³ Jackson Turner Main, Society and Economy in Colonial Connecticut, (Princeton University Press, 1983), p.177.

⁴ Although other owners are suspected holders, the following owners of the Connecticut Mint are confirmed to have held at least 1 slave according to the 1790 Federal Census and other records: Doctor Isaac Baldwin, John Goodrich, James Hillhouse, Joseph Hopkins, William Leavenworth, Mark Leavenworth, and Jeremiah Platt.

The slave who worked at the mint was known only as "Aaron." He is first mentioned in a wage entry on February 29, 1788, and is last referenced in a notation on June 25, 1788, in between those dates he worked 59¼ days. We know Aaron was a slave because the accounting entries state that "Levy Hubbard" received the wages "of his Negro Man Aaron." Although Aaron was the only slave working at the mint, he was not the only person of African heritage. The word "negro" also appears next to Reuben Stevens's name in the ledger. Unlike Aaron, however, Reuben Stevens has both a first and last name and received his wages directly like the other employees. Based on this, one can surmise that he was a freedman.⁵

Life as a freedman or as a black born free of bondage in New Haven was hard. Blacks were generally discriminated against more in Connecticut than anywhere else in New England. The so-called Slave Code was a series of laws passed decades earlier between 1690 and 1730 that institutionalized racism and discrimination in the colony. Black servants were required to carry passes outside of town or risk being treated as a runaway, there was a 9:00 PM curfew in place for all blacks and Indians, alcohol could not be served to them, and they most certainly did not participate in the democratic process. Free blacks were subject to arrest on suspicion of being runaways and had to prove they were free in order to be released from jail and were charged court costs even if they prevailed in the matter—those who could not pay the cost of their wrongful incarceration risked being sold into slavery to cover expenses. Some parts of the Code were designed to prevent manumission of slaves by making masters who freed their slaves personally liable for the slave's upkeep for life; should a freed slave receive public support, municipalities could file suit against the master who freed the slave to recover expenses.

In 1774, Connecticut barred the importation of slaves into the colony.⁶ The motive behind this law was more economic than humanitarian as white workers found it difficult to compete against slave labor for available jobs and there was a desire to keep the black population small to prevent feared unrest. During the Revolutionary War, Connecticut slaves sometimes served in their masters' place or served with the blessing of a patriotic master; those who were honorably discharged at the conclusion of hostilities were generally freed, leading to a large increase in the number of freedmen in the state after independence.⁷ The Superior Court sitting in New Haven in December 1784 ruled that slaves whose masters attempted to reclaim them as property after the war were entitled to a writ of habeas corpus freeing them from bondage.⁸ The ruling was based on an act of Congress that stated only free men could enlist in the Continental Army and therefore a master's "consent to enlistment amounted in law to a complete manumission." Such a finding, even if legally sound, would have been unthinkable 20 years before—the tide had clearly turned against slavery in Connecticut after the war, but it would be a slow death.

⁵ Stevens may have been born free, but the number of blacks in Connecticut born free before the Revolution was small. Accordingly, he is assumed to have been a freedman. Moreover, the treatment between an emancipated African slave and a black man born free in 1788 was insignificant for the purposes of this essay, as no evidence supports the proposition that a black man born free would have a greater opportunity to obtain employment or receive higher wages than a slave who served in the Revolution and was emancipated.

⁶ An Act for Prohibiting the Importation of Indian, Negro or Mulatto Slaves (1774), 14 Pub. Rec. Col. Conn., p 329 (1887).

⁷ By some estimates, several hundred Connecticut slaves gained their freedom through their service in the armed forces during the Revolutionary War. See, Edger J. McManus, *Black Bondage in the North,* (Syracuse University Press, 1973), p. 155.

⁸ Arabas v. Ivers, 1 Root 92 (Conn. Super. Ct., 1784).

⁹ New Haven Gazette (New Haven, CT), Dec. 16, 1784.

Starting in 1784, the Connecticut Legislature began passing laws to gradually end slavery. The Gradual Abolition Acts of 1784¹⁰ and 1797¹¹ stated that all people born into slavery in the state after 1784 were to be freed at the age of twenty-five; that age was reduced in 1797 to twentyone, bringing slavery in-line with the term of most apprenticeships. To be clear, neither act freed anyone immediately-freedom was decades away for those covered by the act, which failed entirely to emancipate slaves born before 1784, like Aaron. It was not until 1848 when slavery was completely abolished in Connecticut, by which time only a handful of slaves remained. 12 Many Northerners believe to this day that slavery in New England was substantially different than in the American South or West Indies and this is true to a certain degree, but slavery was still slavery and those held against their will could be whipped, raped, chained, beaten, and abused by a Connecticut master without legal repercussions—perhaps it happened with a lesser degree of frequency in Connecticut than in Barbados, but it happened none-the-less.¹³ New Haven papers ran weekly ads for runaway African slaves, some of whom were described as "mulatto"¹⁴ or as having distinguishing characteristics such as red curly hair. Not all Connecticut slaves were black, about 1 in every 5 slaves before the Revolution was a Native American. 15 and an unspecified number were of mixed race; however, based on the designation "negro" in the ledger, it is clear that the Reuben Stevens and Aaron were African-American.

Working alongside Aaron and Reuben were white men and boys. Boys also did not receive their wages, rather that money was paid to their fathers or, more likely, their step-fathers or masters as many of the recipients of the boys' wages had a different last name. That young boys would be employed at the mint should come as no surprise. After all, Abel Buell, one of the mint's owners and the man who likely oversaw production there, was an early adopter of child labor. Having been apprenticed to a silversmith at a very young age, Buell had no qualms with child labor. During the War for Independence he employed 15 to 20 boys manufacturing types and even placed advertisements in newspapers seeking "likely young lads" to be instructed in the mechanical arts. Buell would later help introduce child labor to industrial manufacturing at one of Connecticut's first cotton mills—a practice that would continue in that industry for over a hundred years. Buell would be the mechanical arts of the mechanical arts of the mechanical arts.

Based on what we know of Abel Buell, the biggest surprise is that there were so few children working at the mint. All told, the 1788 wage records confirm that just five boys worked at the mill, one of whom was Buell's own son, Benjamin, who was apprenticed to his father. The children working at the mint can be easily identified because the word "boy" appears next to their names in the ledger. A parent or guardian could expect to receive 2 shillings a day for a child's labor, or about half of what a grown man was paid for unskilled work. Boys who worked

¹⁰ An Act Concerning Indian, Mulatto, and Negro Servants and Slaves (1784), 1784 Act and Laws of Conn., pp. 223, 235.

¹¹ An Act in Addition to an Act, Entitled An Act Concerning Indian, Mulatto, and Negro Servants and Slaves (1797), 9 Pub. Rec. St. Conn. (1953), p 38.

¹² An Act To Prevent Slavery (1848), 1848 The Revised Statutes of the State of Conn. (Hartford, Case, Tiffany & Co.), p. 584.

¹³ The author recommends Andrea Stuart's novel *Sugar in the Blood: A Family History of Slavery and Empire* (Vintage, 2013) to anyone interested in the history of slavery in the Caribbean and the plight of female slaves.

¹⁴ The word "Mulatto" is considered a pejorative today and means a person of mixed white and black ancestry, especially a person with one white and one black parent.

¹⁵ Some of the first slaves in America were aboriginal prisoners taken during the Pequot war in 1638 who were later sent to the West Indies in exchange for African slaves.

¹⁶ John Barber, Connecticut Historical Collections, (Hartford, 1836), p. 532.

¹⁷ Connecticut Journal (New Haven, CT), Apr. 26, 1781.

¹⁸ Christopher McDowell, Abel Buell and the History of the Connecticut and Fugio Coppers, (C-4, 2015), pp. 181– 185.

for 2 shillings a day were unskilled laborers, not apprentices. As such, their wages were paid to their parents or guardians, not a master craftsman. Young apprentices, on the other-hand, were seen as semi-skilled workers, and earned upwards of 4 shillings a day. An apprentice boy's wages were paid to the skilled craftsman to whom he was indentured. All the boys were most likely between the ages of 13 and 18. In colonial Connecticut, boys as young as 10 or 11 were sometimes indentured as an apprentice, but the average age was closer to 14.¹⁹

Although indentured servitude was a form of bondage, it differed greatly from the slavery of Africans. Black slaves could not expect to ever attain their freedom and this form of slavery, which was based on race, was hereditary rather than contractual. Slaves were considered property in the eyes of the law and could be bought and sold as such. An apprentice or indentured servant on the other hand could expect to be freed upon completion of his or her contract. Moreover, while apprenticeship indentures were often not consensual—young boys seldom had a say in the matter—an apprentice did learn a valuable trade in exchange for servitude and in the expanding colonies tradesmen were in very high demand. Finally, some Europeans who could not afford the expense of the journey to America indentured themselves for a period of years to wealthy land owners in exchange for passage, but this was a bartered arrangement mostly between consenting adults and while it had some aspects of slavery, it was not the same as

involuntary, lifetime, hereditary bondage based on race. At the same time, slaves, apprentices, and indentured servants who fled their masters, could all expect to be hunted down and forcibly returned.

While most New England slaves worked as domestic servants or farm laborers. some were trained in specialized skills. Evidence supports the proposition that Federal Era coins other than Fugios were manufactured in part with slave labor. Daniel Van Voorhis, in whose New York City shop the dies for the early Vermont coinage were made, owned at least one slave and, as shown by a 1784 runaway slave notice,20 (Fig. 1) Ephraim Brasher, who is credited with fashioning what is arguably the most famous pre-federal coin, the Brasher doubloon, utilized a slave named John "Jack" Frances who was a highly skilled goldsmith.

Brasher's "employment" of Jack Frances was not an isolated instance, the 1790

Philadelphia, April 27.

RAN-AWAY from the subscriber, a negro man, named John Frances, but commonly called Jack: be is about 40 years of age, sive feet ten inches bigh, ender built, speaks good English, by trade a gold-mith; be generally affects to be very politie, and it's more than probable be may pass for a freeman. Said negro was carried to New ork and lest in charge of Mr. Ephraim Brasher, gol. smith, from whom he absconded, and returned to me after shulling about this city for a considerable time: bad in when he went away, an old green coat, sustain wasfecast and breeches, a pair of balf boots, but may probably change his dress. All mashers of western and others are forbid to harbour or carry him eff at their peril. Wheever takes up fail negro and delivers him to John Le Telier, goldsnith in Market street, or to the subscriber in New York, shall have the above reward, and all reasonable charges paid.

BENJAMIN HALSTED.

Figure 1. Notice of runaway slave.

federal census lists 4 slaves as part of his New York household. Although it is impossible to determine if any of these slaves were also skilled craftsmen, it seems doubtful Brasher would need or could afford so many domestic servants. Therefore, it is highly probable that one or more of these slaves was also trained as a goldsmith and helped craft the famous gold coins. Nothing in the ledger, however, suggests that either Aaron or Reuben Stevens were trained

¹⁹ Ibid, p. 4, n.15.

²⁰ Pennsylvania Packet (Philadelphia, PA), May 1, 1784. John Frances's Philadelphia master, Benjamin Halsted, was a former partner of Myer Myers, who was arguably the most highly skilled silversmith in colonial America.

craftsmen as their wages and the brief description of the work they performed shows them to have been unskilled day laborers.

An analysis of Reuben Stevens's wages shows he was paid approximately 4 shillings a day, which was in-line with the pay received by unskilled white employees of the mint. Stevens mostly worked at the Hamden copper works, but he was also afforded opportunities to work at the stamping presses and earn extra pay performing additional tasks like cutting blanks. Between February 29 and June 7, 1788, Reuben Stevens worked 35¾ days for which he was paid £7.07.00, earning an additional £2.07.00 cutting blanks, for a total compensation of £9.14.00. This was a handsome sum in 1788 considering two dozen eggs cost 1 shilling, a gallon of rum 4 shillings, and two pounds of butter 1½ shillings in copper coins.²¹

Levy Hubbard was paid 4 shillings a day for his slave Aaron's work at the mint—the going rate for unskilled labor and the same amount paid Reuben Stevens and many of the white adult workmen. Interestingly, Aaron was provided or accepted more opportunities than any other laborer to perform extra work, for which he was paid an additional 4 shillings a day. The total compensation for Aaron's 59¼ days of labor was £11.17.00, out of which 15 shillings was for extra work. Aaron may have volunteered for the extra work because payment for that service was given directly to him instead of his master. Assuming he was able to keep this money, it may have been saved to buy his freedom. Slaves were very rarely able to purchase their own freedom, but such cases were not unheard of in Connecticut. In 1765, Venture Smith, an African slave, was able to buy his freedom for £71.02.00 from extra money he earned with his master's permission.²² The few shillings Aaron received from extra work would not alone have been sufficient for him to purchase his freedom, but perhaps combined with other earnings collected over a lifetime it provided a glimmer of hope.

The highest paid laborers at the mint were all adult white men employed at the Hamden copper works who had the experience and specialized skills needed to turn raw copper into coining blanks ready for stamping. Joseph Smith and James Cockran were the two highest paid employees, each earning 9 shillings a day, or twice the daily wage of the unskilled laborers and apprentices. The 1787 Connecticut Mint records, a transcript of which will appear in the next two issues of *The Colonial Newsletter*, show that Smith was a blacksmith and Cockran a metalworker and that they both worked at the mint prior to 1788.²³ In all probability, William Nettleton, who is listed in the 1788 pay records as Smith's "boy," was a blacksmith's apprentice, as demonstrated by the fact that Smith received 4 shillings a day for Nettleton's labor, the going rate for apprentices, rather than the 2 shillings paid for general child labor.²⁴

²¹ These calculations appear in the 1787 Leavenworth Day Book that tracks activity at the Connecticut Mint, which will be published in *CNL* later this year.

²² Venture Smith, A Narrative of the Life and Adventures of Venture, A Native of Africa, (Pub. by C. Holt, New London, CT, 1798), p. 24. Smith, who was thirty-six on the date of his emancipation wrote, "[t]he reason of my master for asking such an unreasonable price, was he said, to secure himself in case I should ever come to want." Smith had previously been sold for £56. The unequal bargaining power of a slave when dealing with his master and the master's fear that a slave may become indigent and receive public assistance for which he might be charged meant that a slave often paid more than fair market value to obtain his freedom.

²³ Smith was then, as it is now, a common last name making it difficult to positively connect people with that name. Newspaper advertisements from New Haven also confirm there was a Joseph Smith working as a blacksmith in the town. See, e.g., *Connecticut Journal* (New Haven, CT), April 30, 1794, p. 3.

²⁴ After the mint closed, James Cockran took the experience he learned working with copper at the mint and partnered with another mint employee, Jotham Fenton, to form a bell casting business in New Haven, manufacturing some of the largest copper bells made in America for ships, cities, and churches. See, *Connecticut Journal* (New Haven, CT), July 23, 1794, p. 3 and June 26, 1799, p.1.



Figure 2. Female workers at the Philadelphia Mint.

Most of the mint employees were white men; none were women or girls. The reason for this may have been because the work required a combination of mechanical skill and strength to carry, melt, roll, and cut the copper into blanks. This explanation, however, cannot entirely account for the total absence of women and girls from the process. Accordingly, their absence is presumed to be the result of an intentional discriminatory policy rather than circumstance. Twenty years later, when New Haven became a center for American industry and innovation, women and girls would become essential manufacturing employees. In 1788, however, the need for large numbers of factory workers had not yet created significant pressure on society to change the way it viewed women and their role in the workforce outside the home. Conservative Puritan customs were still the norm in 1788, and a woman's place was still viewed as the home, not heavy industry. It would not be until 1850 when women were first employed by the Philadelphia Mint as adjusters of gold and silver coinage and 1852 when they were permitted to feed planchets into the presses, long after the Connecticut Mint had closed. (Fig 2)

In comments made by Mint Director Snowden published in 1863 it was determined that "[t]here are no other occupations in the mint, than where they are now employed, suitable for women. I am greatly in favor of employing women, and I have extended the employment of them as far as is practicable. For adjusting the wright (*sic*) of coins, and attending or feeding the coining presses, I consider women as not inferior to men, except that they cannot endure work for a great a number of hours."²⁵ One of the primary benefits of hiring women to perform these tasks was that women were paid less than half of what men earned for the same jobs. Indeed, it was not until 1887 when equal pay was enforced at the U.S. Mint. Accordingly, while the Connecticut Mint records reflect quickly changing attitudes towards blacks, and a willingness to pay black men the same as white men for unskilled labor, they also demonstrate that traditional views regarding female labor were much more deeply entrenched.

²⁵ Virginia Penny, *The Employment of Women: A Cyclopedia of Women's Work*, (Walker, Wise & Co., Pub., Boston, 1863), p. 62.

Many of the lives of the mint's employees can be traced, but little is known of what became of Reuben Stevens or Aaron. Research on slaves and free blacks in the decades before and after the Revolution is notoriously difficult to conduct as these marginalized people often only had one name, did not own land, were largely illiterate, and seldom appeared in the newspaper. Something of Aaron's story, however, can be gleaned by studying his master, Levy a/k/a Levi L Hubbard, who was born on February 10, 1736, in Guilford, Connecticut, Levi's younger brother was Rev. Bela Hubbard, the pastor of Trinity Church in New Haven. Levy moved to New Haven shortly after his brother became pastor at Trinity in 1767 and was appointed an officer of the church, owning a small house across the street very near Abel Buell's silversmith shop. Moses Bates, who operated one of the mint's stamping presses, was Trinity's organist and sexton, and lived rent-free in a house belonging to the church next to Levi Hubbard.²⁶ In all probability, Aaron and Moses both worked odd jobs for Buell from time to time including operating the screw presses to make Connecticut coppers. The 1790 census does not list a slave as part of Levi Hubbard's household, but a free non-white is listed. In contrast, the 1800 census lists a slave as part of the household, but not a free non-white. It is unlikely that Hubbard would free Aaron only to purchase a new slave; therefore, it is assumed that the 1790 census is in error and that Aaron remained a slave until at least 1800. Neither the 1810 nor 1820 census list a slave living with Hubbard, and his will, which was probated in New Haven on August 21, 1825, does not mention a slave either. Based on this information, Aaron was freed, died, sold, or ran away sometime between 1800 and 1810, leaving no further trace in the historical record.

Reuben Stevens's trail runs equally cold after he left the mint. The marriage records of The First Congregational Church of New Haven list "Reuben, a negro servant to Dr. Carrington" uniting with "Rose, negro servant to Mr. Woodward" on August 3, 1775. It is impossible to know for sure if this is Reuben Stevens. If it is, it would mean he was still a slave in 1775 as "negro servant" was a synonym for "slave." Apparently, the word slave was not used in polite New Haven society, which may account for the high number of "free" non-white persons shown on the 1790 census living in the homes of wealthy residents. The 1790 Federal Census also did not include the first and last names of free blacks and the handwriting and condition of the document makes it difficult to read. However, on page 16 of the New Haven census there appears the barely legible words, "Reuben Negroe." This is the only listing of a black man in New Haven with the first name of Reuben. The census lists Reuben as the head of household and shows him living with another free non-white person, presumably his wife. The 1800 census does not show anyone matching Reuben Stevens living anywhere in New England. Possibly he died in one of the yellow fever epidemics that swept New Haven in the mid-1790s or he moved far away. Hopefully, future researchers will be able to fill in the missing pieces of Aaron and Reuben Steven's lives.

With the discovery of the Connecticut Mint records and the publication of the first transcript, many new insights and articles will appear regarding the mint's owners, presses, coins, and distribution methods, but we should not lose sight of the fact that a mint is run by its employees. Abel Buell may have engraved the dies and the presses may have been brought from New York, but it was Moses Bates and Aaron who took a copper blank created at the mill by Reuben Steven and stamped it with an image inspired by Benjamin Franklin; without them and the other employees of the mint, there would be no Fugio coppers.

The New-York Air Furnace by Gary A. Trudgen; Vestal, NY¹

The 1788 account book kept by Jeremiah Platt for the Copper Mint Co. in New Haven, Connecticut, contains many significant entries concerning the operation of this Confederationera mint. Study of this document will vastly increase our understanding of the state coinages that took place before the U.S. Mint opened in 1792. One of the more important revelations is found on page 80 of the account book where we learn that two new stamping or coinage presses were purchased to assist with the coinage of Federal coppers. James Jarvis, who owned 5/16 of the company, had contracted with the Federal government to produce 300 tons of copper coins. The stamping presses were purchased from Peter Curtenius who billed the company £24.2.4 on February 6, 1788. Interestingly, Curtenius owned a foundry in New York City where these coinage presses had been fabricated and not imported from Europe or constructed by Abel Buell as previously believed. The name of Curtenius' business was the New-York Air Furnace.

Peter Theobaldus Curtenius was born in New York City on April 3, 1734, the son of Rev. Anthonius Curtenius, a pastor in the Dutch church.² Peter married Catharine Goelet in 1755, the sister of his then business partner Isaac Goelet, whose ironmongery [hardware] firm was located at the Golden Key in Hanover Square.³ In the summer of 1767, Peter T. Curtenius and Richard Sharpe constructed and opened a foundry in the West Ward of the city.⁴ They named their foundry the New-York Air Furnace because it employed a reverberation-type furnace that burned coal instead of charcoal, the typical fuel for the earlier furnaces, such as the blast furnace. In November 1772, a fire destroyed their facility, a £400 loss.⁵ Undeterred, the two partners, along with William Lyle, rebuilt the furnace "in a much completer manner than before it burnt down" and reopened it in April 1773.⁶

When war came to the city in 1776, all commerce came to a grinding halt. Being a staunch Whig, Curtenius took an active part in the American Revolution. He was a member of the New York Committee of Correspondence and was appointed Commissary General by the New York Provincial Congress, with the rank of colonel, responsible for purchasing provisions for the Continental Army. When independence from England was declared he ordered the toppling of the lead statue of King George III that stood in Bowling Green, melting its valuable metal into musket balls. In the fall of 1776, all Whigs moved out of the city with many retreating up the North [Hudson] River into patriot held territory. A newspaper ad (Fig. 1) indicates that Curtenius relocated his family to an area just west of Newburgh, NY, near Orange Lake, which would later become the site of Machin's Mills. In 1782, he was appointed New York State Auditor, an office he held until 1797. After the British evacuated the city on November 25, 1783, business was gradually restored as displaced residents returned home to repair the destruction inflicted

¹ The author would like to thank Chris McDowell for sharing his primary source information on this subject and to also thank Chris, John Kleeberg, and Phil Mossman for their editing comments.

 $^{2\} https://en.wikipedia.org/w/index.php?title=Peter_T._Curtenius\&oldid=752119073.$

³ The New-York Gazette or the Weekly Post-Boy, February 4, 1754.

⁴ The New-York Gazette, August 17-24, 1767.

⁵ The New-York Journal or the General Advertiser, November 26, 1772.

⁶ The New-York Gazette or the Weekly Post-Boy, April 12, 1773.

⁷ Ibid. fn. 1.

⁸ New-York Historical Society, http://www.nyhistory.org/exhibit/bullet-mold-16. The statue was not entirely made into musket balls. It was shipped to Norwalk Connecticut and then loaded onto wagons to be sent to Oliver Wolcott's foundry in Lichfield, Connecticut. But at Wilton, Connecticut the shipment was intercepted by Loyalists and the fragments buried in the Davis Swamp.

9 Ibid. fn. 1.

22 10

by the retreating Red Coats. It is unknown when Curtenius arrived back in the city but the ad shows he was there by August 28, 1786, living at No. 18 Little Queen Street. In all likelihood, he returned shortly after the British departed to assess the extent of damage sustained to his properties.

In October 1787 Curtenius announced by the way of a broadside and ads in the local newspapers that he had reopened the foundry.¹⁰ The broadside contained a woodcut of the actual facility showing smoke billowing from its chimney and sailing ships in the background plying the North River (Fig. 2). The broadside proudly stated "Peter T. Curtenius and Co. have repaired the New-York Air Furnace, and have procured the best workmen, together with the necessary apparatus to carry on the manufacture of cast-iron, in the completest and best manner, so that the ware they make will be equal to any imported from Europe and the price less." He provided an inventory of the products manufactured at his facility that included cast iron screws, an item necessary for the fabrication of the type of coinage presses then in use, the screw press.

How did Curtenius gain expertise in coinage press construction? It so happened

FORSALE,
Small FARM, about four miles west of Col-

denham and twelve miles from New-Windfor landing, in the county of Ulster; containing 70 acres, forty of which is wood land, the rest meadow and plow land; on which is a fmall barn, orchard and a very good dwelling house, containing four well finished rooms, and a spacious cellarkitchen under the whole. It is in a thick fettled neighbourhood, and in fight of Good-Will meeting house; the fituation is good for a flore or tavern. as it lies on the main road which comes down from New-German Town, Hopewell and Pekaniffink: The produce of which fettlements must all pass the door to go to the landings, at New-Windfor and Newburgh. Paper money will be taken in pay-For terms apply to ment. PETER T. CURTENIUS.

At No. 18, Little Queen-freet.

Figure 1. New-York Packet, Monday, August 28, 1786.



Figure 2. Woodcut of the New-York Air Furnace as it appeared in 1787.

that the New-York Air Furnace was located adjacent to Samuel Atlee's brewery, a fact actually stated in the broadside. A 1775 French map¹¹ of the city shows the brewery, then called Harrison's Brewery, next to Curtenius' foundry (Fig. 3). The map is so detailed that it shows the

¹⁰ New-York Daily Advertiser, October 17, 1787; New-York Journal, October 18, 1787; and New-York Morning Post, October 19, 1787. The broadside is illustrated on p. 122 of The First Federal Congress: 1789–1791 by Margaret C. S. Christman, Smithsonian Institution Press, 1989.

¹¹ LeRouge, Georges Louis, "Plan de New York et des environs," 1775.

actual building footprints on the properties along with orchards and gardens. In a recent paper titled "James F. Atlee, Albion Cox, Bob Birch, and the 1792 Birch Cent," Christopher McDowell, after a study of known primary source material, concluded that Samuel and James Atlee produced counterfeit copper coins alongside their brewery operation.¹² Where did Atlees obtain the necessary machinery for their clandestine coinage operation at the brewery? Either they imported the machinery or they had it constructed locally. Samuel Atlee arrived in the city on November 3, 1783, and immediately began repairs on the brewery which had suffered extensive damage during the war. By the end of May 1784 the brewery was reopened and producing porter. It took Curtenius

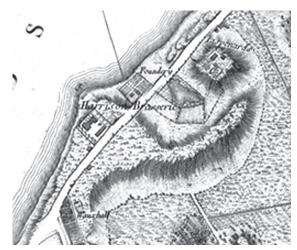


Figure 3. Detail taken from the 1775 French map.

much longer to repair his foundry and restart production by which time Atlee's brewery was no doubt up and running. Thus, the machinery required for the coinage operation at the brewery was most likely imported. However, being business neighbors, Samuel and James Atlee and Peter T. Curtenius were certainly familiar with each other's activities. It is a logical conclusion that Curtenius viewed the brewery's coinage machinery and may have even done repairs on it before the machinery was later removed for use at Machin's Mills in the spring of 1787. Thus, Curtenius had first-hand knowledge of coinage press construction; information that he used to his advantage after the brewery closed its doors in late 1787.

From the Copper Mint Co. account book we know that the coined Federal coppers, now known as Fugio coppers, were shipped in kegs on board sloops from New Haven to New York City. Thus, it is likely that the stamping presses constructed by Peter Curtenius were also delivered to New Haven by sloop. An entry on page 80 of the account book states that Jonathan Booth [of New Haven] trucked the presses to the mill for a fee of 5s3d. It is believed that his fee would have been much more if he had hauled them by wagon from New York City, a distance of some 80 miles over rough roads. In all likelihood he just moved them from the wharf in New Haven to the mill.

The stamping presses that the Copper Mint Co. purchased from Curtenius were operated by three men indicating that they were of medium size (Fig. 4). Larger coining presses, like the one that came from Atlee's brewery and was employed at Machin's Mills, ¹⁴ required five men 12 McDowell, Christopher R., "James F. Atlee, Albion Cox, Bob Birch, and the 1792 Birch Cent," *The*

12 McDowell, Christopher R., "James F. Atlee, Albion Cox, Bob Birch, and the 1792 Birch Cent," *The Colonial Newsletter: A Research Journal in Early American Numismatics*, Serial No. 162, Volume 56, Number 3, November 2016, p. 4493.

13 lbid. p. 4497. The April 1, 1787, Machin's Mills Indenture states that the Atlees would provide "certain implements" to the partnership. McDowell concludes that these implements were the heavy machinery required in the coinage operation.

14 Ruttenber, E. N., *History of the County of Orange: with a History of the Town and City of Newburgh*, Newburgh, NY, 1875, pp. 211–2. The description of the coinage press came from Machin's son, Thomas N. Machin. He Stated: "The coinage press was a screw, with an iron bar about ten feet long through the top. On each end of the bar was a leaden weight of perhaps 500 pounds. The threads of the screw were large and square and worked through an iron frame. Ropes were attached to each end of the bar, and it was swung about half way around by two men pulling upon the ropes; two other men pulled the lever back, and a fifth laid on the blank and took off the coin with his fingers. The last operative sat in a pit so the lever would not touch his head."

for their operation. With the Curtenius press, one man would place a copper blank on the lower die while the other two men swung the lever arm lowering the upper die to strike a coin.

Peter and Catharine Curtenius had nine children. One of their sons, who was also named Peter, rose to the rank of General in the War of 1812. Peter T. Curtenius died from yellow fever in New York City in 1798. His wife, Catharine, died the same year, probably from the same disease.¹⁵

The fate of Curtenius' foundry is revealed in a May 16, 1797 newspaper ad. Joshua Barker, who was employed at the New-York Air Furnace as a foreman, had erected his own air furnace. Barker states that he "...had the principle management of casting done at the furnace of the late Peter T. Curtenius & Co.

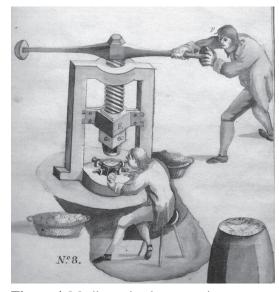


Figure 4. Medium-sized screw coinage press.

for the last four years past... ."¹⁶ Therefore, this notice indicates that Curtenius had closed his foundry sometime before the date of the ad.

Unauthorized coinage production was a covert operation leaving behind little documentation. Numismatists must use legal proceedings, business associations, and circumstantial evidence to better understand who, when, and where the early American coppers they treasure were made. The coinage presses constructed by Peter T. Curtenius at his foundry in New York City adds to the growing indirect evidence that Samuel and James Atlee were involved with counterfeit coinage production at the brewery before joining Thomas Machin's coinage operation in 1787.

¹⁵ Ibid. fn. 1.

¹⁶ Argus (New York, NY), May 23, 1797.

Transcript of the 1788 Connecticut and Federal Mint Account Book prepared by Randy Clark and Christopher McDowell

James Jarvis as one of the Copper Mint C^o Cr Coppers at 18 for s/ or 2/8 per lb 1787 June 18th By duties on 77363/4 lb. coined coppers, coined by said Co to the 26th October last, as per the Inspector's certificate, 9th May last; for account of the following persons, whose proportion of duties on the above at 5 percent is as follows Viz ~ John Goodrich¹ 5/16 of the above is 16.0.11 Abel Buell² 2/16 ditto 6.8.41/2 James Hillhouse 2/16 ditto 6.8.41/2 Samuel Bishop 2/16 ditto $6.8.4\frac{1}{2}$ James Jarvis 5/16 ditto 16.0.11 **51.6.11**½ Ditto By duties on 900 lb. coined coppers, coined by James Jarvis since 26th October last to 9th May per Inspectors certificate at 2/8 per lb amounts to £120 ... at 5 percent is 6.0.0 October 6 By duties on 8400 lb. coined coppers, coined by James Jarvis since 9th May last per the Inspectors certificate this day

<u>£</u> 113.6.11½

New Haven November 10th 1787 Errors Excepted Jeremiah Platt

James Jarvis as one of the Copper Mint Co. Cr

1788 May 17th By duty on 5475 lb. Coined Coppers, Coined

since 6th October last ... as per Inspectors Certificate

this day ... at 2/8 per lb amounts to £730 ... at 5 percent is <u>36.10.0</u>

New Haven May 20th 1788 Errors Excepted Jeremiah Platt

¹ This appears to be a mathematical error as a 5/16 share equals 16.2.4.

² This appears to be a mathematical error as a 2/16 share equals 6.8.11.

Net Wt

New Haven February 26, 1788

Tare

34	Federal Mint Dr
32	To General Account of Copper for 15 kegs
	of Federal Coined Coppers, shipped
	this day on board the Sloop Delight
	Captain Beecher consigned to Mr.
	John Blagge Merchant New York Viz ~

			Taic	INCLAN
F.C.	No 2	210 ½	10 ½	200
No2 @ 16	No 3	210 ½	10 ½	200
	No 4	211	11	200
	No 5	211	11	200
	No 6	210	10	200
	No 7	210	10	200
	No 8	209 ½	9 ½	200
	No 9	211	11	200
	No 10	210	10	200
	No 11	231	11	220
	No 12	211	11	200
	No 13	210	10	200
	No 14	210	10	200
	No 15	211	11	200
	No 16	<u>210</u>	10	200

3020 Nett Pounds

of Federal Coined Coppers shipped this day on board the Sloop Deborah Anne Captain John Clark consigned to Mr. John Blagge New York Viz ~

			Tare	Net Wt
F.C	No 17	209 ½	9 ½	200
No17 @ 26	No 18	209 ½	9 ½	200
	No 19	210	10	200
	No 20	210	10	200
	No 21	210	10	200
	No 22	211 ½	11 ½	200
	No 23	210	10	200
	No 24	209 ½	9 ½	200
	No 25	210	10	200
	No 26	211 ½	11 ½	200

2000 Nett Pounds

New Haven February 29th 1788

3 31	Per Mem. Book ~	d Coppers tant³ to yesterday 2575	^{lb.} 2/8	. 343.6.8
36 3	Cash	above	Dr	353.6.2
	March	າ 1		
2. 36	Wages To cash paid the following pers		Dr	
	Elijiah Bradley	for 6 days work	1.12.0	
	Ezra Potter	5 ditto	0.13.4	
	Benjamin Buell	6 ditto	1.8.0	
	John Blend	2 ditto	0.9.0	
	Reuben Stevens (negro)	6½ ditto	1.6.0	
	Jotham Fenton	5 ditto	1.5.0	
	Isaac Woodin	10½ ditto	2.5.6	
	Joseph Smith for himself	6 ditto		
	& his boy Wm. Nettleton	6 ditto	3.12.0	
	John Tracy	6 ditto	1.4.0	
	John Blend for plating 1369).	1.0.6	
	Pratt Jones for cutting 1611 8 George Peckam	b. blanks 4/hundred	3.4.6	
	James Cockran	4 days work	1.16.4	
				19.16.2
	Paid the following persons for wat Stamping Press to			
	Moses Bates	for 6 days work	1.8.0	
	Stephen Brown	6 ditto	1.4.0	
	Levy Hubbard	6 ditto	1.4.0	
	of his Negro Man Aaron			3.16.0
	-			23.12.2

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³ In the original, this is often abbreviated "Inst." Instant, in this context, means in or of the present month.

		Nev	v Haven N	/larch	8 th 17	88	
36	Cash	_					
7	To James Jarvis	Account	paid received	of			
	Isaac W	oodin fo	r an old Bay hors	e			
	in Copp	ers at 18	to the shilling				2.12.0
2.	Wages	 			Dr		
36	To cash paid the	following	persons for wor	k at the			
	Copper	Works a	t Hambden to thi		receipts		
	Jotham Fenton		for 6 days work	(1.10.0		
	Joseph Smith for	himself	5 ditto				
	& his boy Wm.	Nettleto	n 6 ditto		3.3.0		
	Pratt Jones		1 ditto		0.4.0		
	Reuben Stevens	(Negro)	2½ ditto		0.10.0		
	John Tracy		53½ ditto		10.14.0		
	Elijah Bradley		6 ditto		1.12.0		
	Benjamin Buell		2 ditto		0.9.4		
	Isaac Woodin		6 ditto		1.6.0	<u></u>	19.8.4
	Paid the following		s for work at ess to this day pe	er receints			
	Moses Bates	iipiiig i i	for 6 days ditto		1.8.0		
	ditto for Extrav	vork	1 ditto	,	0.4.8		
	Stephen Brown	VOIR	6 ditto		1.4.0		
	ditto for Extrav	vork	1 ditto		0.4.0		
	Levy Hubbard for Negroman Aar	r his	6 ditto		1.4.0		
	Aaron for extrawo		1 ditto		0.4.0	<u></u>	
			10th)			24.17.0 ⁴
34	Federal Mint						
32	To General Accou						
32			d yesterday per 0			ard	
			igned to Mr. Joh				
	слор г	ony conc	ignou to mi. com	Blaggo I			
			Wt.	Tare		Net Wt	
	F.C	No 37	235½	10½		225	
	No37 @ 45	No 38	211	11		200	
	_	No 39	212	12		200	
		No 40	219	11		208	
		No 41	211	11		200	
		No 42	210½	10½		200	
		No. 42	2441/	441/		200	

200 1833 Nett Pounds of coppers

200

200

11½

11½

11

No 43 211½

No 45 211½

No 44 211

⁴ This appears to be a mathematical error as these amounts equal 23.17.0, not 24.17.0.

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New Haven March 10th 1788

Federal Mint)r
To General Account of Copper for 10 kegs of Federal	
Coined Coppers shipped this day on	
board the Sloop Delight Captain Beecher	
consigned to Mr. John Blagge Merchant New York, Viz ~	
	Coined Coppers shipped this day on board the Sloop Delight Captain Beecher

		Wt	Tare	Net Wt
F.C	No 27	231½	11½	220
No27 @ 36	No 28	249	9	240
Ü	No 29	227	12	215
	No 30	215½	10½	205
	No 31	211	11	200
	No 32	211	11	200
	No 33	240½	10½	230
	No 34	217	12	205
	No 35	212	12	200
	No 36	<u>241</u>	11	230

2145 Nett Pounds of

Coppers

David Phipps	
Coined Copper	
Cash	
To Coined Coppers for the above 9961/4 lb. Coppers received since 6th Instant	
& Counted per Mem book	134.1
James Jarvis Account Paid	 Or
To Cash paid Abel Buell per your order in your letter dated 17 October at different times from 5 th November last to the 10 th Instant for which Abel Buell has given his Note dated	
11 Instant to James Jarvis payable on demand with interest per Mem book	t 150. 0

New Haven March 15th 1788

2.		ounts		Dr	
36	To cash paid the following persons for work at the Copper Works at Hambden to this day per receipts			per receipts	
	Jotham Fenton	for 5 days work		1.5.0	
	Elijah Bradley	6 ditto		1.12.0	
	Joseph Smith for himself			0.40.0	
	& his boy Wm Nettleton			3.12.0	
	John Tracy	6½ ditto		1.6.0	
	Munson Peckham (boy)	4 ditto		0.8.0	
	Pratt Jones	1 ditto		0.4.0	
	John Blend	1 ditto		0.4.6	
	Benjamin Buell	5 ditto		1.3.4	
	Wm Nettleton ExtraWork	1½ ditto		0.6.0	
	Reubin Stevens (Negro)	7½ ditto		1.10.0	
	Chauncey Potter	12½ ditto		2.10.0	
	Isaac Woodin	6½ ditto		1.8.2	
	Stephen Ford for his boy Lazarus Ball	27¾ ditto		2.15.6	
	James Cockran	7 ditto		3.3.7	
	Abraham Cooper	5 ditto		1.0.0	
	Lewis Bradley	8½ ditto		2.5.4	
	Jared Goodyear	3½ ditto		1.3.4	
	Philip Clynne	5½ ditto		1.2.0	
	Jones & Peckham for Cutt		s 2.0.8		
	John Blend for Plating 445	4 ^{lb.}		3.6.9	
					32.6.2
	Paid the following persons Stamping Press t				
	Moses Bates	for 6 days work	1.8.0		
	Stephen Brown	6 ditto		1.4.0	
	Levy Hubbard for his	5 ditto		1.0.0	
	Negroman Aaron				
	Aaron extrawork	1 ditto		0.4.0	
					3.16.0
					36.2.2
15	To Abel Buell for his son B	eniamin Buell wad	nes		
. •		er Bill			23.9.0
		ne received pay fo			
					59.11.2

New Haven March 20th 1788

Copper Works		Dr	
To Daniel Talmadge for			
of Sundry blacks	miths tools from		
15 March 1787 to	o 15 March 1788 .	per his account yesterda	y 1.10
Daniel Talmadge			
To Cash paid him in ful			0.15
	22		
Wages		Dr	
To cash paid the following	persons for work	at the	
Copper Works a	at Hambden to this	day per receipts	
Ichabod Alling	for 5 days work	1.6.8	
Elijah Bradley	6 ditto	1.12.0	
Jotham Fenton	5 ditto	1.5.0	
Pratt Jones	2 ditto	0.8.0	
George Peckam	2 ditto	0.8.0	
Munson Peckam (boy)	4 ditto	0.8.0	
John Blend	2½ ditto	0.11.3	
John Tracy	4½ ditto	0.18.0	
Reubin Stevens (Negro)		1.0.0	
Joseph Smith for himself his boy Wm Nettleton		2.18.6	
Benjamin Buell	2 ditto	0.9.4	
Stephen Ford for his boy Lazarus Ball	4 ditto	0.8.0	
Peckham & Jones for			
cutting 1257 lb b	lanks	2.10.4	
John Blend for plating 900) lb	<u>0.13.6</u>	
			14.1
Paid the following for worl		-1-4-	
Stamping Press	to this day per rec	eipts	
Moses Bates	for 51/2 days	1.5.8	
Stephen Brown	5½ ditto	1.2.0	
Levy Hubbard for his Negroman Aaron	5 ditto	1.0.0	
Aaron extrawork	½ ditto	0.2.0	
			<u>3.9.</u>
			18.6.3

New Haven March 29th 1788

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2. 36	Wages To cash paid the following Copper Works a		at the	
	Jotham Fenton	for 6 days work	1.10.0	
	Isaac Woodin	10½ ditto	2.4.5	
	Filials Decalled	6 ditto	1.12.0	
	George Peckam John Blend	5½ ditto	1.2.0	
	John Blend	6 ditto	1.7.0	
	Reubin Stevens (Negro)		1.2.0	
		0, 2 3		8.17.5
	Paid the following for worl Press to this day			
	Moses Bates	for 5½ days	1.5.8	
	Stephen Brown	5½ ditto	1.2.0	
	Levy Hubbard for his		1.0.0	
	Negroman Aaron	o ditto	1.0.0	
	Aaron extrawork	½ ditto	0.2.0	
				3.9.8
				12.7.1
		April 5		
2. 36	Wages To cash paid the following Copper Works a		at the	
	Ichabod Alling	for 2 days work	0.10.8	
	Lewis Bradley	3½ ditto	0.18.8	
	Jotham Fenton	4¾ ditto	1.3.9	
	Eli Potter	2 ditto	0.8.0	
	Isaac Woodin	5¾ ditto	1.4.11	
	John Blend	1 ditto	0.4.6	
	John Tracey	9½ ditto	1.18.0	
	Elijah Bradley	51/4 ditto	1.8.0	
	Joseph Smith	6 ditto	2.14.0	
	Abraham Cooper	2 ditto	0.8.0	
	George Peckam	1½ ditto	0.6.0	
	Munson Peckham	5 ditto	0.10.0	
	Reubin Stevens (Negro)	1 ditto	0.4.0	
	Benjamin Buell	2 ditto	0.9.4	
	Isaac Woodin for Wm Mai	ncer 2½ ditto	0.10.0	
	Thomas Cook	2½ ditto	0.10.0	
	John Blend for Plating 31:	25 lb @ 1/6 hundr		
	Peckam & Stevens for cur			
		-		18.0.0

New Haven April 5th 1788

28. 26.	Brig Lark
	Ditto For the difference on £129.9.8 paid him in coppers at 19 for 1/. N York Currency & that sum at 18 for 1/ Lawful Money
26. 36.	David Austin, Jr To sundry accounts
27.	To Broome & Platt for Cash paid David Austin's order on S.B. in favor Isaac Bronson dated 30 th Nov 1787 Solid Coin
	NB. The above was for one half of S.B. & James Jarvis Note given to D. Austin Jr. for £240 solid coin dated 12 Sept last for part pay of Brig Lark – which Note was taken up, & a new Note given by S.B. payable to John Sherman & Hez Wetmore for £120 solid coin. Amount of the other half of B. & Jarvis Note above mentioned with interest from 12 Sept last – which last note Sherm & Wetmore assigned to Pearsall & Glover in NYork.
28. 26.	Brig Lark
	Ditto for the difference on £138 NYork Currency in coppers paid on acct said Note at 20 to the New York Shilling & that sum at 18 for s/ Lawful Money

New Haven April 5th 1788

To Cash paid F on ac above Danie	Pearsal & Count S.B. e mentione l Phoenix	Glover (by Dan F 's Note to Sherr d in Coppers se 27 Feb last for t	Phoenix) man & Wetmore ent to hat purpose		
which To Broome & F & Glo coin t	at 18 copplatt for ver (by Dahe) he balance	Currency at 2 pers for 1/ Lawfi cash paid Pears niel Phoenix) in e of S.B.'s Note	ul Money is sall solid to		153.6.8
Sileit	nan & wei	more above me	ntionea Principa	al & Interest	1=0 10 0
To General Ac Fede 27 th N Capta	count of Coral Coined farch on boain Iarch on Cl		egs of ed the Deborah Anne I to Mr. John	Dr	
		Gross Wt	Tare	Net Wt	
F.C	No 46	232½	10½	222	
No46 @ 51	No 47	241	11	230	
	No 48	240	10	230	
	No 49	221	11	210	
	No 50	229	9	220	
	No 51	240	10	230	
				1342 Nett Po	ounds of Copper
		12			
				Dr	
		cker & Co for tw			40.0.4
etc. to	or the Sein	e per Bill			12.2.4
				Dr	
		er on J. Platt in		naid vesterday	6 12 8

New Haven April 12th 1788

31. 27.	Copper Works To Broome & Platt for Cash Benjamin Jarvis received of John J. Pearsal at Fairfield				
	13th October last in Solid Coin for his expenses to New York to see Mr Pintard Per B. Jarvis receipt 13 October.		4.14.9		
31.	Copper Works	Dı	-		
36.	To Cash paid the following bills etc. etc.				
	Pd Jacob Shephard 4 kegs per Bill	20 February	0.10.0		
	Pd Henry Gibbs 1 Large Grindstone	ditto	1.18.0		
	Pd for 2 loads wood	21 ditto	0.19.6		
	Pd for leather to mend bellowes	23 rd ditto	0.3.0		
	Pd for 1 large file 2/3 4 lb candles 4/6	25 th	0.6.9		
	Pd for 1 bottle oyl for stamping press	27 th	0.3.9		
	Pd Eli & Thaddeus Beecher for Iron, steel,				
	lead, etc, etc per Bill	27 February	10.8.0		
	Pd Moses Gilbert 8 loads hay for the Horse	1 March	1.10.0		
	Pd Jesse Potter for wood, brush, etc	ditto	3.5.3		
	Pd for 13 brushes to clean the barrs	ditto	0.2.2		
	Pd Caleb Ford forging dies per ditto	6 th ditto	1.8.6		
	Pd for 1 load wood for the stampers	7 th ditto 8 th ditto	0.12.0		
	Pd for 3 lg. files Pd Peter Johnson 120 bushels coal	10 th ditto	0.4.0 3.7.6		
	Pd for 1 Gallon molasses for the furnace	ditto	0.3.0		
	Pd Samuel Wise casting boxes, etc	11 th ditto	2.10.2		
	Pd Elijah Clark 210 bushels coal	ditto	4.1.8		
	Pd for 1 load wood	ditto	0.12.0		
	Pd for 2 large files 5/ Cart of pipe clay 5/6	15 th ditto	0.6.6		
	Pd Jesse Potter 1 load brush	ditto	0.3.0		
	Pd Stephen Ford, for wood, brush, etc	ditto	1.2.0		
	Pd Sam Andrews for wood for knealing	17 th ditto	2.14.0		
	Pd Simeon Cooper 100 bushels coal	18 th ditto	2.10.0		
	Pd Abel Buell 10 loads hay per Bill	22 ditto	1.2.6		
	Pd for 1 load wood	25 th ditto	0.9.6		
	Carried Forward		40.12.9		

New Haven April 12th 1788

31.	Copper Works		Dr	
36.	To Cash paid Titus Street for Steel Pd Isaac Thomas 176 B Pd Joseph Smith for iron Pd Elijah Clarke 114 bus Pd Titus Goodyear 180 b Pd Simeon Todd 95 bush Pd for 1 bottle oyl 3/9 for Pd John Blend sundrys p Pd Simeon Warner 194 b Pd Geo Clark 114 ditto Pd Elijah Clarke 114 ditto	ushel coal , etc. per ditto shel coal ditto bushel ditto nel ditto files 5/ per Bill ushel coal ditto	25 March 27 ditto 29th ditto 3rd Inst ditto 5th ditto ditto ditto 7th ditto ditto 10th ditto Total	1.3.9 2.18.8 0.10.1½ 1.18.0 3.0.0 1.11.8 0.8.9 0.4.0 3.15.6 1.18.0 1.18.0
2. 36.	Wages To Cash paid the following persons at the Copper works at Ha	for work	Dr	
	Jotham Fenton Elijah Bradley Joseph Smith Ruebin Stevens for Cutting 248 lb	for 5 days work 5¾ ditto 5¼ ditto . blanks		1.5.0 1.10.8 2.7.3 0.10.0 5.12.11
	Paid the following for work at the Stamping Press to this da	y per receipts		
	Moses Bates Stephen Brown Levy Hubbard for his Negroman Aaron	7 days work 6½ ditto 8 ditto		1.12.8 1.6.0 1.12.0
	Aaron for extra work ½ ditto			0.2.0 4.12.8
				10.5.7
27.	30 Broome & Platt		 Dr	
23.	To Elijah Austin for Cash received at different times for the B			111.1.10

New Haven May 1st 1788

Federal Mint	of 1 p		stin freight	d duties per b	Dr bill	3.10.0
GrossWt Tare Net Wt F. C No 52 231 11 220 No52 to 58 No 53 211 11 200 No 54 235½ 10½ 225 No 55 261 11 250 No 56 241 11 230 No 57 226 11 215 No 58 241½ 11½ 230 Wages Dr Wages Dr To Cash paid the following persons for work at the Copper Works at Hambden to 26th Ult. per receipts Jotham Fenton 1½ ditto 0.6.0 Elijah Bradley 12 ditto 3.4.0 John Tracey 9½ ditto 3.4.0 John Tracey 9½ ditto 1.17.0 George Peckam 6½ ditto 1.6.0 Munson Peckam 5½ ditto 0.11.0 John Blend 9½ ditto 0.11.0 John Blend 9½ ditto 0.6.0 Stephen Ford for his boy 6 ditto 1.2.2.9 Jonathan Ford 1½ ditto 0.6.0 Stephen Ford for his boy 6 ditto 1.2.2.9 Paid the following for work at the Stamping Press to 26 Ult. Moses Bates 3½ ditto 0.15.2 Stephen Brown 3¼ ditto 0.13.0 Levy Hubbard for his 3 ditto 0.12.0 Negroman Aaron Aaron for extra work ¼ ditto 0.1.0	To General Ac Fede 24th L Capt	ccount of Co ral Coined (Jlt. ⁵ on boar Abraham B	opper for 7 kegs Coppers shippe of the Sloop Frigradley consigner	of ed the endship ed to	Dr	
F. C No 52 231 11 200 No52 to 58 No 53 211 11 200 No 54 235½ 10½ 225 No 55 261 11 250 No 56 241 11 230 No 57 226 11 215 No 58 241½ 11½ 230	1411. 0	om blaggo	oronane rrow	TOTAL VILL		
No52 to 58						
No 54 235½ 10½ 225 No 55 261 11 250 No 56 241 11 230 No 57 226 11 215 No 58 241½ 11½ 230						
No 55 261	N052 to 58					
No 56 241						
No 57 226 11 215 230 1570 Nett Pounds of						
No 58 241½ 11½ 230 1570 Nett Pounds of			_ : :			
Wages						
Wages		140 30	<u>Z4 1/2</u>	11/2		ett Pounds of Co
Paid the following for work at the Stamping Press to 26 Ult. Moses Bates 3½ days 0.15.2 Stephen Brown 3½ ditto 0.13.0 Levy Hubbard for his 3 ditto 0.12.0 Negroman Aaron Aaron for extra work ½ ditto 0.1.0					0.00	
Stamping Press to 26 Ult. Moses Bates 3½ days 0.15.2 Stephen Brown 3½ ditto 0.13.0 Levy Hubbard for his 3 ditto 0.12.0 Negroman Aaron Aaron for extra work ½ ditto 0.1.0	Jacob Fenton Elijah Bradley John Tracey George Pecka Munson Pecka John Blend Jonathan Ford Stephen Ford Lazar	n am am d for his boy rus Ball	for 1 1½ 0 12 d 9¼ 0 6½ 0 5½ 0 1½ 0 1½ 0	2 days work litto litto litto litto litto	0.6.0 3.4.0 1.17.0 1.6.0 0.11.0 2.2.9 0.6.0 0.12.0	
Moses Bates 3½ days 0.15.2 Stephen Brown 3½ ditto 0.13.0 Levy Hubbard for his 3 ditto 0.12.0 Negroman Aaron Aaron for extra work ½ ditto 0.1.0	Jacob Fenton Elijah Bradley John Tracey George Pecka Munson Pecka John Blend Jonathan Ford Stephen Ford Lazal John Blend for	n am am d for his boy rus Ball r Plating 118	for 1 1½ 0 12 d 9¼ 0 6½ 0 5½ 0 1½ 0 1½ 0	2 days work litto litto litto litto litto	0.6.0 3.4.0 1.17.0 1.6.0 0.11.0 2.2.9 0.6.0 0.12.0	14.2.6
Stephen Brown 3½ ditto 0.13.0 Levy Hubbard for his 3 ditto 0.12.0 Negroman Aaron Aaron for extra work ½ ditto 0.1.0	Jacob Fenton Elijah Bradley John Tracey George Pecka Munson Pecka John Blend Jonathan Ford Laza John Blend for	am am d for his boy rus Ball r Plating 118 ving for wor	for 1 1½ 0 12 d 9¼ 0 6½ 0 5½ 0 1½ 0 1½ 0 6 ditto	2 days work litto litto litto litto litto	0.6.0 3.4.0 1.17.0 1.6.0 0.11.0 2.2.9 0.6.0 0.12.0	14.2.6
Levy Hubbard for his 3 ditto 0.12.0 Negroman Aaron Aaron for extra work 1/4 ditto 0.1.0	Jacob Fenton Elijah Bradley John Tracey George Pecka Munson Pecka John Blend Jonathan Ford Lazar John Blend for	am am d for his boy rus Ball r Plating 118 ving for wor	for 1 1½ 0 12 d 9¼ 0 6½ 0 5½ 0 1½ 0 1½ 0 6 ditto 85 lbs. k at the to 26 Ult.	2 days work ditto ditto ditto ditto ditto ditto ditto	0.6.0 3.4.0 1.17.0 1.6.0 0.11.0 2.2.9 0.6.0 0.12.0	14.2.6
	Jacob Fenton Elijah Bradley John Tracey George Pecka Munson Pecka John Blend Jonathan Ford Laza John Blend for Paid the follow Stam Moses Bates	am am for his boy rus Ball r Plating 118 ving for work pping Press	for 1 1½ 0 12 d 9¼ 0 6½ 0 5½ 0 1½ 0 6 ditto 85 lbs. k at the to 26 Ult.	2 days work ditto	0.6.0 3.4.0 1.17.0 1.6.0 0.11.0 2.2.9 0.6.0 0.12.0 0.17.9	14.2.6
	Jacob Fenton Elijah Bradley John Tracey George Pecka Munson Pecka John Blend Jonathan Ford Lazar John Blend for Paid the follow Stam Moses Bates Stephen Brow Levy Hubbard	am am for his boy rus Ball r Plating 118 ving for work pping Press vn	for 1 1½ c 12 d 9¼ c 6½ c 5½ c 9½ c 1½ c 6 ditto 85 lbs. k at the to 26 Ult. 3¼ c 3¼ c	2 days work ditto	0.6.0 3.4.0 1.17.0 1.6.0 0.11.0 2.2.9 0.6.0 0.12.0 0.17.9 0.15.2 0.13.0	14.2.6
	Jacob Fenton Elijah Bradley John Tracey George Pecka Munson Pecka John Blend Jonathan Ford Lazar John Blend for Paid the follow Stam Moses Bates Stephen Brow Levy Hubbard Negroman A	n am am for his boy rus Ball r Plating 118 ving for wor nping Press vn for his Aaron	for 1 1½ c 12 d 9¼ c 6½ c 5½ c 9½ c 1½ c 6 ditto 85 lbs. k at the to 26 Ult. 3¼ c 3 dit	2 days work ditto	0.6.0 3.4.0 1.17.0 1.6.0 0.11.0 2.2.9 0.6.0 0.12.0 0.17.9	14.2.6

^{5 &}quot;Ult." is an abbreviation for the Latin *ultimō mēnse*, meaning in or of the month preceding the current one.

New Haven May 3rd 1788

2.	Wages	Dr				
36.	To Cash paid the following persons for work at the Copper Works at Hambden to this day per receipts					
	Jotham Fenton Elijah Bradley Joseph Smith Timothy Stanley John Tracey Chauncey Potter	for 5 days work 6 ditto 5½ ditto 2¾ ditto 3 ditto 3 ditto	1.5.0 1.12.0 2.9.6 0.11.0 0.12.0 0.12.0	7.1.6		
17.	Sundry Accounts to John Goo		or Or			
31.7.	Copper Works for cotton stone copper James Jarvis Acct Prop for the a horse, James Swan h	er works last year e hire of	0.6.0			
10.	last year Benjamin Jarvis Acct Prop for		0.14.0			
	on John Goodrich in fav NB. The above are on Account o Goodrich's Note as per Endor	f John sement on said Note.		1.19.5		
20. 36.	Jotham Fenton To Cash lent him 1 Novembe per Mem Book	r last his Note dated	that day	4.0.0		
2. 36.	1 Wages To Cash paid the following perso Copper Works at Hamb		Or			
	Jotham Fenton Elijah Bradley Timothy Stanley	for 5 days work for 3 ditto 2¾ ditto	1.5.0 0.16.0 0.11.0			
	John Tracey	21/4 ditto =	0.9.0	3.1.0		

New Haven May 17th 1788

31. 36.	To Cash paid David & Ebenezer C	Austin, Isaac Beers, hittenden for Inspecting pers per their receipt	Dr	1.12.7½
2. 36.	To cash paid the follow		Dr	
	James Cockran Jotham Fenton Elijah Bradley Timothy Stanley Stephen Brown George Peckham Levy Hubbard for his Negroman Aa	for 3 days work 4½ ditto 6 ditto 4½ ditto 5 ditto 5 ditto 5 ditto 5 ditto	1.7.3 1.2.6 1.12.0 0.18.0 1.0.0 1.0.0	7.19.9
		20		
19. 31	To Cash sent the Treas by Capt Natha Sloop this day containing 273 for duty on 54 October last . NB. The Treasurer rece	aniel Storer on board his aniel Storer on board his aniel Storer of coppers 3% nett pounds @ 2/8 75 inspected since 6th appector's certificate sipt for the above is dated 3	 e 17 Instant. 81 st May 1788.	36.10.0
36. 8.	Samuel Broome accou at different tim	Cashnt prop paid him es from 21st Feb to this		
9.	Jeremiah Platt Acct pai times from 23	ots. & Mem Book dreceived at different d Feb to this day receipts & Mem Book	166.3.0 139.15.3	205 49 2
				305.18.3
31. 19.	Copper WorksTo State of Connecticu	t for duty on 5475 ^{lb.} Coined pectors certificate 17 Instar	Dr I since	36.10.0

Cainad Cannara	ew Haven M	ay 21 1788 __	-
Coined Coppers To Copper Works for from 9 th April to per Mem. Bool	r coined coppers recei o this day 2383 ^{lb.} @		
	or the above ars received since 9th A		
	24		
Copper Works To Cash paid Abel Budeduct for was	uell for 270 ^{lb.} copper a stage 12½ percent3	s follows Viz 33¾ , @ 2/	
Ditto paid Sundry perso	ns 9¾ lb copper (6¼ lb ditto	② 20 coppers per lb ② 15 coppers ditt	0
			 -
Wages To Cash paid the following		Dr	
Wages To Cash paid the following Copper works Elijah Bradley	ing persons for work a at Hamden to yesterda for 6 days	Dr the ay per receipts 1.12.0	-
Wages To Cash paid the following Copper works Elijah Bradley Timothy Stanley	ing persons for work a at Hamden to yesterda for 6 days for 5½ ditto 3 ditto	Dr the ay per receipts	-
Wages To Cash paid the following Copper works Elijah Bradley Timothy Stanley Levy Hubbard for his	ing persons for work a at Hamden to yesterda for 6 days for 5½ ditto 3 ditto		-
Wages To Cash paid the following Copper works Elijah Bradley Timothy Stanley Levy Hubbard for his Negroman Aar	for 6 days for 5½ ditto 3 ditto on 31 ing persons for work a		-
Wages To Cash paid the following Copper works Elijah Bradley Timothy Stanley Levy Hubbard for his Negroman Aar Wages To Cash paid the following to yesterday. p	for 6 days for 5½ ditto 3 ditto on 31 ing persons for work a		-
Wages	for 6 days for 5½ ditto 3 ditto on ing persons for work a for 6 days for 5½ ditto 3 ditto on ing persons for work a for 6½ days 2½ ditto		-
Wages	for 6 days for 5½ ditto 3 ditto on 31 ing persons for work a per receipts for 6½ days 2½ ditto 3½ ditto	Dr the ay per receipts 1.12.0 1.9.4 0.12.0	-
Wages To Cash paid the following Copper works Elijah Bradley Timothy Stanley Levy Hubbard for his Negroman Aar Wages To Cash paid the following to yesterday. p Elijah Bradley Timothy Stanley Geo Peckham John Tracey	for 6 days for 5½ ditto 3 ditto on 31 ing persons for work a ger receipts for 6½ days 2½ ditto 3½ ditto 3½ ditto 3½ ditto 3¼ ditto	Dr the ay per receipts 1.12.0 1.9.4 0.12.0	-
Wages	for 6 days for 5½ ditto 3 ditto on 31 ing persons for work a er receipts for 6½ days 2½ ditto 3½ ditto 3¼ ditto 2 ditto	Dr the ay per receipts 1.12.0 1.9.4 0.12.0	-

New Haven June 7th 1788

2. 36.	Wages To Cash paid the followin Copper Works a		at the	Dr	
	Jared Cooper Ruebin Stevens Timothy Stanley Geo Chatfield (boy)	8½ ditto 9¼ ditto 6¼ ditto 6¼ ditto 2 ditto 6 ditto 3½ ditto 5½ ditto n	1.19.0 1.6.0 1.14.0 1.17.0 1.5.0 1.13.4 0.5.4 1.4.0 0.14.0		12.19.8
	Elias Bates James Dixon Aaron	2 days 2 ditto 2 ditto	0.9.4 0.8.0 0.8.0	_	1.5.4 14.5.0
		9			
31. 36.		own oper @ 10d opers to the s/ whic o the s/ is equal to	:h	Dr 9.15.0	
	Ditto paid Hezekiah Sabi	n for ② ditto		20.7.6	30.2.6

New Haven June 24th 1788

To Copper Works for	^r 914 ^{lb.} coined coppe 7 Instant to this day		12
Cash		Dr	
To Coined Coppers for			
	received since 7 Ins	stant	
& Counted. Pe	er Mem Book		12
	25		
Wages		Dr	
To Cash paid the follow Copper works		at the 21st Instant, per receipts	
James Dixon	for 6 days	1.4.0	
Elijah Bradley	7⅓ ditto	1.19.1	
Lewis Bradley	4 ditto	1.1.4	
John Blend	2 ditto	0.9.0	
	2⅓ ditto	0.11.8	
John Tracey	11¾ ditto	2.7.0	
George Chatfield		0.4.0	
	4 ditto	0.16.0	
Jared Cooper	3½ ditto	0.14.0	•
Daid the following for w	ork at the atomning		9.
Paid the following for w press to 24 th Ir	nstant per receipts	s viz	
Moses Bates	for 3 days	0.14.0	
Reubin Stevens	3 ditto	0.12.0	
Levy Hubbard for his	3 ditto	0.12.0	
Negroman Aai	ron		<u>1.</u>
-			1

New Haven June 25th 1788

26. 36.	To cash paid Mrs Phi	which amounts at 18 to the s/ to		2.5.0
31. 2.	To Wages for the Bal	ance of that account of wages paid since 31st Dec last		437.15.9
		July 13		
26. 20.	Brig Lark for ½ Mont Wages, for wh on me 29 th Dec	David Phippshs extra advanced ich he drew an order colast @ 30 days sight dated yesterday	Dr	
		dated yesterday to the s/ is 18 for s/	. 6.6.0	
36.	Cash in full @ 1	18 to the s/		44.44.0
				11.11.8
6. 36.	To Cash paid the follow	ing persons for work at rks at Hambden to the 28 Ult. & 5 In		
	Jotham Fenton	for 6 days	1.10.0	
	Timothy Stanley	4 ditto	1.1.4	
		8 ½ ditto	2.5.4	
	John Tracy	9 ½ ditto	<u>1.18.0</u>	6.14.8
		August 19		0.1.1.0
6. 36.		ing persons wages to yesterday. per		
	James Dixon	for 1¼ days	0.5.0	
	John Blend	1¾ ditto	0.7.10 ½	
		3 ditto	0.16.0	
	John Tracey	2½ ditto	0.10.0	
	Benjamin Buell	6 ditto	1.8.0	
	Levy Hubbard for his	3½ ditto	0.14.0	4.0.401/
	Negroman Aar	on		4.0.101/2

New Haven September 1 1788

3. 31.	Coined Coppers To Copper Works for 249 lb. coined coppers received from 9th August to this day			33.4.0
36. 3.	Cash To Coined Coppers for the above 249 lb. received since 9th April last & Counted per Mem Book.			34.16.2
31. 36.	Copper Works	10 April ditto 11th ditto 12th 14th per ditto 20th 26th 3rd May 27th ditto 30th .31st 3 June 4th 10th ditto 30th 1 July 5th s 8th	7.8.0 3.7.4 1.13.4 0.9.4 0.7.6 5.8.7 ½ 0.4.6 0.4.0 3.4.3 0.4.6 0.5.6 1.16.0 3.3.4 1.18.10 0.4.6 0.7.6 2.12.0 3.3.4 0.15.2 0.16.0 0.15.9	38.9.31/2

New Haven September 1 1788

37. 36.	Federal Works To Cash paid the following	ng Bills Viz	Dr		
	Paid Jonathan Booth for of timber to set stamping Per bill Paid trucking Federal pre Paid Caleb Ford forging Paid Robert Townsend for Paid Peter Curtenius for Paid S. P. Broome for least	press in esses to the Mill 295 dies or Iron per ditto	29 th April 1 May 6 Feb last 10 July	5.0.7 24.2.4	58.13.6
15. 36.	To Cash paid you order to Ditto paid ditto to paid ditto to you Paid you 200 lb Paid your order Paid Paid Paid Paid Paid Paid Paid you	o your boy o your son ur boy coppers per receipt in favor J Troup ceipt to your boy ceipt to your boy ditto ditto ditto per receipt in favor of Eldad Mix ditto to your boy	14th March 12th ditto 25th ditto 10th April 15th ditto 25th ditto 16th May 22th ditto 24th ditto 27th ditto 11 June 18 ditto 30th ditto 30th July 4th Aug 9th ditto 12th ditto 26th ditto	0.15.10 1.10.0 1.0.0	69.14.11

New Haven September 1 1788

36. 8. 9.	Sundry Accounts To Cash	
	from 11 June to this day in Coppers per receipt & Mem Book	
		59.8.2
6. 36.	Wages	
	Paid John Blend for 1 days work 0.4.6	
	Paid Geo Peckham 4 ditto 0.16.0	
	Paid Lewis Bradley 1 ditto 0.5.4	
	Paid Timothy Stanley 1½ ditto0.8.0	
		1.13.10
16. 36.	Benjamin Buell	1.15.0
31. 22.	Copper Works Dr To Fishing Siene for the amount that account	18.7.11
31. 15.	Copper Works	10.11.0
35. 15	Profit & Loss	50.6.5

New Haven September 13th 1788

	o Connecticu	unt of Copper It Mint for the fol-			Dr	
Ρ	Copp urchase of Solitto	g copper delivered to ber Works Viz ~ undry persons 24th N of Abel Buell		Pounds of 286 482 211		
(p		Vorks account in er folio 31)				979
	o James Jarv Copp Mint f Mint, as wi Viz C Fede	vis account proprieto per taken from the Fe for account of the Co & made into Conner II appear by the follo copper Works accour ral Mint, Connecticuined Coppers ~	or for 24284 lb. of ederal connecticut cticut Coppers owing accounts nt, General Acct Co	1s/	Dr	1214.4.0
	o Connecticu 2428 Mint, Mint, the w for by now g & red	th Mint for the abo 4 b copper taken fro & made into Copper being a part of whice thole quantity the Feron the General Accounts go to the credit of the fluces the quantity deferred Mint, so much	ve Im the Federal Irs for account of Co In is included in Ideral Mint has Cre Int of Copper; which It is Connecticut Mint It is connectic	onnecticut dit n must	Dr	of Copper 24284
	o General Acquant quant as wi	linttint .	the whole oined Coppers rec in the	eived	Dr Pound	ds Coined Coppers 58946

New Haven September 13th 1788

32. 33.	Sundry Accounts to General Account of Copper Connecticut Mint for the proportion of Wastage on 63554 ^{lb.} Copper the whole		ds of Copper
34.	quantity delivered the works by said Mint Federal Mint for its proportion of Wastage on 13057 ^{ID.} Copper, the whole quantity delivered the works by said Mint	<u>lbs</u>	947 5555
27	Broome & Platt	Dr	
28	To Brig Lark for nett proceeds of her freight to Dublin (exclusive of freight paid here by Elijah Austin) received by Smith Ramadge, after deducting said Brigs whole disbursements in Dublin As per Smith Ramadges acct currently with S. Broome & his acct with Brig Lark dated 1 May last		Irish Sterling 42.10.4 ½
	Ditto for nett proceeds of staves sold in Dublin by Smith Ramadge as paid his account Sales, & 6% customs with S. B. 1 May last Reduced to British Sterling, exchange 8 1/3	Irish Sterling	43.17.5 86.7.9 ½ 6.12.11
	Reduced to Lawful Money, exchange 33 1/3	British Sterling	79.14.10½ - <u>26.11.7½</u> 106.6.6
	Deduct £68.8 lawful money the account of Sam Broome's bill on Smith Ramadge for £50 Sterling on acct of her freight which Brig Lark has credit for 31 Dec last		68.8.0 37.18.6

New Haven September 13 1788 ~

28 27	Brig Lark	Irish Sterling 3.15.6
	Ditto for interest charged by Smith Ramadge on advance made on her freight, postage, etc as per his account currently with S. B. 1 May Irish Sterlin Reduced to British Sterling exchange 8 1/3 Reduced to Lawful Money, exchange 33 1/3 +	0.7.10
10 27	Benjamin Jarvis account paid	British Sterling 40.0.0 13.6.8 53.6.8
3. 35.	Coined Coppers	143.5.0
6. 20.	Wages	
31. 6.	Copper Works	16.9.4½

New Haven September 13 1788

35.	Profit & Loss To Sundry Accounts	ŗ	
7.	To James Jarvis Account proprietor for the		
	difference of his account in being charged		
	with Coppers at 18 for s/ & the amount		
		186.9.8	
8.		168.14.11	
9.		120.15.8	
10.	· · · · · · · · · · · · · · · · · · ·	62.1.0	
16	To Benjamin Buel for the difference on 35/ at 18 for s/		
		0.11.8	
28.	To Beef for the Balance	<u> 10.19.3</u>	
		5	549.12.2
27.	Broome & Platt		
8.	To Samuel Broome account proprietor for ½ the		
	balance that account being specie		
9.	To Jeremiah Platt ditto for ditto		
			38.2.10
31.	Copper Works Dr		
25.	To Suspence Account for the balance of that		
	account being coppers paid James Jarvis		
	to purchase sundrys in New York		
	for which no account has been rendered		41.5.0
36.	Sundry Account To Cash Dr		
15.	Abel Buel paid Daniel Lyman in July		
		2.6.5	
31.	Copper Works paid Benjamin Jarvis for Samuel Warner's		
	Note to deliver 100 bushels of Coals delivered 5 Nov		
	1787- which I allowed B. Jarvis in his account		
		1.13.4	
9.	Jeremiah Platt for the difference in Cash Account	2.9.9 ½	
			$6.9.6\frac{1}{2}$

⁶ This should be page number 85, not 84.

New Haven October 18th 1788

	opper Works Deremiah Platt Account Proprietor For cash paid Silas Hotchkiss for gudgeons etc received of him in April 1777 – which was to be returned him or paid for when he called for them as per his bill received this day		4.3.3
	ohn Pintard Digital James Jarvis account proprietor for Cash received by said Pintard as entered to his credit 29 th Nov las solid co	t oin	300.0.0
To	imes Jarvis Account Proprietor	Dr 522.18.0	
to wh by ou be wh	B. The above was delivered Mr. Pintard & charged to his account nich is now transferred to Mr Jarvis Account this direction. The coppers were to be laid at in produce, which with the beef was to e shipped to Madeira, the nett proceeds of the nole to be shipped in Wine on board the by for the East Indies		1122.18.0
	opper Workserpont Edwards & Co Owners of Ford's Mill for 1 Years rent from 1 March 1788 to 1 March 1789 as per lease		57.10.0

New Haven December 3rd 1788

	above 210.0.4 and 210.10.0		31.11.0
9.	To Jeremiah Platt Account Proprietor for ½ of the above £13.0.4 and £15.10.8		
	For 12 lb. tea 30/ 1 barrel flour 30/	3.0.0	17.5.6
	Ditto for half of £15.10.8 balance of cash paid by Broome & Platt in NYork on account flour for B. Buell in July last	7.15.4	
	£13.0.4 paid Daniel Hinsdale on his executions in 1787	6.10.2	
15. 8.	Abel Buell		
	Federal Works	<u>58.13.6</u>	346.3.6
37.	To Federal Works for the balance that account as Mr. James Jarvis Account Proprietor is charged for the proportion of expenses for the	50.40.0	
07	1787 to the 12 January 1789 is 1 year 11 months @ £150 per annum	87.10.0	
31. 15.	Copper Works To Sundry Accounts Dr To Abel Buell for his wages from 12 February		
	27		9.11.9
	the lease of said Mill this year per his receipt	7.3.9	
29.	Pierpont Edwards & Co Owners of Ford's Mill paid Pierpont Edwards on account of		
	Edwards in full for his account per his receipt	2.8.0	
9. 7.	Sundry Accounts To Jeremiah Platt Account Proprietor	Dr	
	on Abraham Bishop in favor of J. Platt dated in NYork 3 rd Ult. for 80 dollars		24.0.0
9. 7.	To James Jarvis Account Proprietor for said Jarvis's order	Dr	

New Haven December 27 1788

	opper Works Profit & Loss for the balance said Copper Works Acc		1814.19.
	mes Jarvis Account Proprietor		656.11.9
Dit	tto paid Wm & John Scott's bill of Carp enters work in stamping store in May last per bill & receipt this day	2.0.0	2.18.9
Je	opper Works remiah Platt Account Proprietor for cash paid Eli & Thaddeus Beecher their bill of German Steel, etc dated 15 th Instant		
			110.3.8
	equal to specie tto for cash paid Benjamin Buell in NYork 11 Inst per receipt tto for ditto paid him this day in full	100.0.0 6.7.6	
	James Jarvis Account Proprietor for his note given him up dated 11 March last for £150 in coppers at 18 to the s/ ~ &	Dr	